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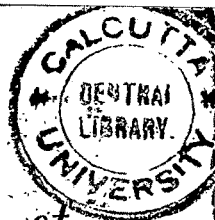
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Minorities and Public Education

An Economic Analysis of an Aspect of the Education of the Children of Minority Groups

By BERNARD BROWN

WHEN DISCUSSING PROBLEMS in the field of public finance, economists speak of public goods and ways of financing them, and distinguish, as well as show the similarities, between exhaustive and non-exhaustive expenditures. It is the purpose of this paper to apply these and other economic concepts to an abstract analysis of grade school education in the United States and in the process draw some conclusions about the educational status of children who are members of minority groups.

The plan of this paper will be as follows: (1) A statement of the manner in which the terms "student" and "costs of education" will be used in the paper and the latter's relation to the ways in which education is financed. (2) The interrelation of education as a public good and free and compulsory education. (3) The reasons for private education and the confusion between exhaustive and non-exhaustive expenditures. And, in conclusion, (4) the implications of the analysis for minorities.

I

Definition and the Use of the Term Education

WHEN THE TERM EDUCATION is used in this study it is meant to apply only to schooling between kindergarten and the end of high school. Generally speaking, the child in the United States is legally bound to attend

school for the decade of his life between the ages of six and sixteen.¹ The term student when used in this paper will be meant to apply only to such a child. And when we discuss decision-making by this student it is understood that decisions by minors are made by their parents or guardians.

The measure of total cost per student (as well as our analysis of who pays for education) is dependent upon the breadth of our definition of the "costs of education." We would include in a narrow concept of "costs of education" direct personnel costs of the educational establishment (teacher's salaries are hopefully the bulk of this, but it will also include salary supplements and salary (wages) and supplements for the administrative and custodial staff), the cost of the physical plant, textbooks, and some supplies. A broader definition might include the cost of transportation, auxiliary supplies such as paper and pencils, the implicit wages of the parent who tutors his child, as well as other costs that schooling imposes on the parent of a child. As it is the definition characterized as "narrow" that is being used when laymen (and most economists when they are not being self-consciously professional) speak of the cost of educating children, that is how it will be referred to in this paper, unless otherwise noted.

We commonly classify elementary education in two categories—public and private. Using the narrow and more usual definition of cost of education we can characterize public education as education that is provided free of charge to the individual student, or more realistically, free to the student's family. Free does not mean that the family has no extra cost due to the existence of the school but that, given the existence of the school, they have no extra costs due to the fact that their child attends. The total cost (again in the narrow sense) is paid by the community through the device of a governmental unit or agency. Of course, private gifts may be made to the school but these will in all probability be a very minor part of the needed revenues. A governmental unit pays the salaries of the teachers and administrators and finances the physical plant and its maintenance, and the public school's top executives, the School Board, will either be elected by the public or appointed by an elected public official.

Just as a public school may be the recipient of private gifts, so the private school may be the beneficiary of governmental largesse. The factor of ~~the~~ ^{the} ~~recognition~~ ^{recognition} is certainly an important implicit governmental payment,

¹ This statement is, of course, not strictly correct due to the noncoincidence of a child's birthday and the start and end of the school year, and may be considerably modified because of the occupational status of either the parent or the child, e.g., migrant worker or child star, by differences in state laws, or by difficulties or lack of effort in enforcing the law—particularly among very low income groups. But it is generally true and sufficiently so that its acceptance will not distort the discussion in this paper.

It is not, however, a subsidy given only to the private school. It is given because the school falls into the same tax category as churches, charities, and non-profit eleemosynary institutions in general. Relatively minor items of government support such as the provision of particular textbooks or transportation may be provided for the private school child on the same basis as for the public school child. Or certain welfare provisions of government that are given out on the school grounds, such as hot lunches for children from low income families, may be given out regardless of whether the school happens to be public or private. However the distinguishing characteristic of the private grade school in the United States has been that the major source of its funding is non-governmental and, consequently, to follow through with the reasoning of the previous paragraph, its top executives are acting as private citizens and not as government officials or appointees.

The simplest case of private school financing is one in which the source of funds is the parents of the children in attendance. This could be apportioned on a per child or a per family basis, with or without modification on the basis of family income or size. It could be supplemented or entirely replaced by a system in which membership in the group rather than children in school is the prime determinant of the family's share of the cost. Church schools are a case in point. Or the school may greatly rely on gifts of alumni and of philanthropies to minimize the cost to the families of the current students. Non-denominational private schools are an illustration. From the point of view of cost it is the existence or non-existence of a significant item in a government budget that determines whether a school is public or private (from the political point of view it is the organization of the school board) and not the fact of private costs to the parent. These could be very great even in the public school if one chooses a broad definition of costs of education.

It is evident that the existence of private schools are a clear financial gain to government and so to the taxpayer. A large group of individuals who are legally eligible for a costly government service have voluntarily chosen not to avail themselves of the opportunity, while at the same time continuing to share in the financing of those who do so avail themselves.

II

Public Education—Free and Compulsory

HOWEVER, PRIOR TO A DISCUSSION of the possible reason for not choosing public education, we must understand why public education is there to be chosen in the first place. Specifically we must ask why the provision of

education for the young is a concern of the group rather than simply a concern of the individual family. Only when this question is answered can we go on, in the following section, to an analysis of the reasoning of the individual choosing between public and private education.

Economic man (as well as a number of other types of man) has been one who pursued his own interest to the exclusion of all else. Adam Smith devised a system, that has continued to be refined down to the present day, in which individuals following their self-interest exclusively would produce a result that would be identical to one produced by an omniscient and omnipotent perfectly altruistic individual acting for the group. The process was so magical as to be likened to an invisible hand. For instance, the individual purchases a good because it benefits him. The possible additional benefit or even harm this good might have on his neighbor is not something for him to take into consideration in his own individual decision. Now, suppose there was a good, say, a fence, that would benefit both our man and his neighbor. The benefit to one does not warrant its purchase by that individual, yet the benefit of the fence to both neighbors more than offsets its cost. If the two could get together they could purchase the fence and be happier than with any alternative use of their funds. Thus Adam Smith's system of individual action leading to maximum group welfare may break down when we are dealing with goods whose existence affects the welfare of individuals, regardless of whether or not they have participated in its financing. Such a good is called a public good,² and its provision on an optimal level will generally require group, not individual, action.

Now, elementary education is such a good. There can be, of course, little doubt that benefits accrue to the individual who is getting the education. In spite of the oversimplifications caused by leaving out a host of relevant variables, the current advertising campaign directed at the drop-out and potential drop-out does have an element of truth in it. The individual with an education through high school, other things being equal, will have a higher present value of lifetime income than the person who dropped out before his sixteenth birthday. If this, however, was the sole argument for education then a combination of an effective advertising campaign (to eliminate consumer ignorance) plus an efficient capital mar-

² The major sources for discussions of the concept of a public good are Richard A. Musgrave, *The Theory of Public Finance* (New York: McGraw-Hill, 1959), pp. 8-12 (although Musgrave uses the term "social want") and Paul A. Samuelson, "The Pure Theory of Public Expenditure," and "Diagrammatic Exposition of a Theory of Public Expenditure," *Review of Economics and Statistics*, 36 (1954), pp. 387-89 and 37 (1955), pp. 350-56, respectively. The most recent work on this subject is James M. Buchanan, *The Demand and Supply of Public Goods* (Chicago: Rand McNally, 1968).

ket (to allow investment funds to flow towards the area with the greatest returns, which in this case would mean larger individual expenditures on education) should lead us toward the socially optimal level. What makes education a public good is the argument that we are all better off living in a society in which the citizenry is educated regardless of whether or not we ourselves are educated. Therefore each individual has an interest in his neighbors getting an education which is in addition to the interest his neighbor has in his own education.³ Thus even though an individual might decide quite rationally, that in terms of his individual well-being he has had sufficient education, the additional benefits to the group of his furthering his education may very well more than offset the associated costs. Thus if the welfare of the society is to be maximized the individual would have to continue his education.

But why is compulsion necessary? Could we not expect the rational individual to continue his education to the point where further returns cease to offset costs, and so with appropriate subsidies a society should be able to have any (average) level of education it desired? The answer of our society (and perhaps of all societies that view education as a public good) has been negative and I believe correctly so.

(1) The degree of rationality on the part of the student or his family that was implicitly assumed in the question of the previous paragraph is surely heroic. The shortsightedness of people, especially those preoccupied with the problems of day-to-day living due to economic pressures, would result in too high a discount rate being applied to future income streams. The net result is underinvestment in education detrimental both to the individual and to society. In order to protect society and for the good of the individual the latter must be forced to attend school. As with the proverbial piano lessons, he will thank you later.

(2) Perhaps even more important than the inability to evaluate properly alternative income streams is the probable lack of knowledge of both the size and the variety of the income streams available to the educated individual. After all the purpose of education is to relieve ignorance and it is precisely those who are ignorant whose perspectives would be so limited as not to see the value of the return from education. A survey may show education to be an extreme case of a superior good (one whose demand increases as income increases) while objectively it should be a neutral

³ Extensive rationales for education as a public good are given in Jerry Miner, *Social and Economic Factors in Spending for Public Education* (Syracuse: Syracuse University Press, 1963), chap. II, "Education and the Theory of Public Expenditures," and Charles S. Benson, *The Economics of Public Education* (Boston: Houghton Mifflin, 1961), Part I, "Education as an Economic Institution."

or inferior good (on the grounds that the rich have ways of earning an income, other than the sale of their own skills, that the poor do not have). Thus the results of lack of education cause an undervaluation of education and compulsion is called for if the cycle is to be broken. The desires of society to break the cycle is an aspect of the philosophical position of our society that calls for (in perhaps a weak and sometimes inconsistent voice) equality of opportunity.

(3) Although the college student may feel he is the principle victim of the concept of *in loco parentis*, the activities of the domestic relations courts make it clear that society makes use of this concept even in cases where the parents are physically present. Compulsory education can be viewed as a further extension of this reasoning. Thus a child taken out, or permitted to drop out, of school when he is under the control of his parents is not making a decision but having a decision made for him. In certain circumstances the parents may discount the future earnings of a child at a much higher rate than is in the best interests of the child. Thus to protect the child, society makes his attendance at school compulsory. (Such circumstances, unfortunately, are most likely to occur in a situation in which the parents are preoccupied with current living standards, and this means largely low income families. Middle income families, as high school counselors and college professors will testify, are more likely to make the opposite error.)

(4) Finally, education is compulsory because of the nature of this particular public good. The benefits to society fall off sharply when there are relatively small declines in the percentage educated.⁴ Using economic terminology—there are increasing marginal returns to society as the percentage of the six to sixteen-year-old population being educated is increased. In other words, the subsidy only pays if all the kids are in school. If individual decisions were to be relied upon the subsidy to the marginal child would have to be very great and, in fact, there would be a tendency toward understatement of benefits by the individual as he bargains for a larger subsidy. The only feasible way of having full participation without extraordinary payments to some, and so inviting the possibility of a complete breakdown of the system is through compulsion.

If we accept the argument that universal education is a public good (which, as we have seen, implies compulsion) then we simultaneously ac-

⁴ A non-economic variation on this is Roscoe C. Martin's statement in *Government and the Suburban School* (Syracuse: Syracuse University Press, 1962), p. 4, that compulsion follows "by easy logic" from the idea that "education is basic to the successful practice of democracy."

cept the imposition of a cost on society. The question is now how this cost should be distributed among the members of that society?

One obvious way is to have the cost borne by the individuals being educated (or by the members of their families). We can easily agree to the proposition that financial benefits accrue to the individual who is educated. If there are private benefits there should be private payments, and of course, if there are in addition public benefits there should be public payments. A free private market should result in the output of the private good "education" as it causes the production of other desired and important private goods. And if this is less than that which is optimal from the societal point of view, it can easily be increased by the provision of supplemental funds by the public sector.

The financial benefits of education to an individual are benefits that will show themselves in the increased size of his future income stream. The present value of this increase when compared with the current cost of getting an education determines whether education is an investment that should be made. But the cost is now and the earnings are in the future and the student who doesn't have the cash must turn to an impersonal market. If he is realistic in his forecast of future income streams and is using a proper discount factor (that is, basing it on the current state of the money market and allowing a premium for risk), an efficient capital market would make these funds available.

But the capital market may not be sufficiently efficient for this purpose.⁵ Lack of knowledge, differences in evaluation of the risks involved, different sets of values, or just the novelty of the idea, would inhibit transactions. A governmental middleman with the power to intervene on a case by case basis⁶ and with the funds to guarantee loans would be necessary to offset this rigidity in the private sector. Relying on the capital market to finance the private costs of education would thus entail a government bureaucracy as well as considerable government expenditure (in addition to that necessary to cover the cost of the difference between the optimal level of education from the individual point of view and the optimal level from society's viewpoint). It is simpler, and would in fact imply less government action, to couple compulsory education with free education.

⁵ Milton Friedman, "The Role of Government in Education," in *Capitalism and Freedom* (Chicago: University of Chicago Press, Phoenix Books, 1962), discusses the imperfections of the capital market, but with explicit concern for vocational and professional education (as opposed to the "general education"). See footnote 10 for a further discussion of Friedman's essay.

⁶ If either party is irrational or is trying to bargain for a better loan the government would have to have the additional power of forcing him to accept the appropriateness of its decision.

III

The Rationale of the Private School

THOSE WHO THOUGH ACCEPTING the compulsion and the taxes refuse the free education remain to be considered. They send their children to school and pay a share of the support of the public schools but choose to pay the cost of the education of their own children, ignoring the enticement of the free public schools. What are they getting for their money and, although they are obviously willing to pay for it, can the private cost of this education be reconciled with our previous rationalization of free education?

The first part of the question can be answered on the same terms as any other question concerning consumer choice. The rational consumer chooses among goods on the basis of the relation of their prices to his values. He will consider as irrelevant any statement concerning the "true" value of the goods, whether this is simply a promotional figure or one based on actual costs of production. If sending a child to a private school means an expenditure of, say, \$1,000 that would be available for something else if he were sent to a public school, and the parent chooses the private school, then the additional value that a private school education gives is greater to the parent than could be obtained from an alternative use of that \$1,000. Thus he has freely made his choice and has increased his welfare.

The economist's approach to the second part of the question would be in terms of the distinction between government expenditures on goods and services⁷ and government transfer payments (that is, a fiscal act on the part of government that provides funds for a non-governmental entity which in turn could be used for the purchase of goods and services)—the distinction between exhaustive and nonexhaustive expenditures.⁸

Our analysis has led to the conclusion that all should go to school and that the cost of this education should be borne by the community in general. But this reasoning had nothing whatsoever to do with the production of education in the sense of who should produce it. As long as it is adequately financed by the community so that there is no private cost then the

⁷ The term "government expenditures on goods and services" is itself ambiguous. It would mean that government is actually producing the goods and services that is there is a government enterprise involved in production, or that government is purchasing goods and services produced by a private enterprise. Fortunately, this distinction makes no difference for the argument of the paper, but, in fact, in the United States, when we are speaking of government exhaustive expenditures on education we are by and large also speaking of government production of education.

⁸ An excellent statement of the full meaning of this distinction is in Francis M. Bator, *The Question of Government Spending* (New York: Harper, 1960), pp. 9-11.

criteria are met. If we add the non-economic criteria of control of course standards and content, this also has no bearing on who produces the good. It only implies that whoever does produce the good will be supervised by a governmental unit. That most education is in fact produced under governmental auspices can only be viewed as a historical accident and in no way follows from the rationale of free universal education. Once we had invalidly associated public production with public financing of education, the next "logical" step was to say that whoever chose not to take the public product would not have the public financing. But the rationale is in terms of the consumption and not in terms of the production. Therefore, all who use the product, it follows from the rationale, should be financed.

Thus a considerable part of the cost of private education that is borne as a private cost is borne because of the confusion between financing a product and producing a product. It is a confusion caused by the misuse of the term expenditure. An argument for a government expenditure cannot be viewed without modification as an argument for an exhaustive expenditure. The conditions of the argument might just as well be satisfied, not only by government producing or even purchasing a good or service, but by transfers to particular individuals, that is, by nonexhaustive expenditures.⁹ What would logically follow from our rationale of free universal education is the payment of a dollar sum per child to each family coupled with the assurance that education will be available for the child at that dollar amount.¹⁰ But any producer could offer education at a higher price and if his product is differentiated he may get customers who will pay for the difference. It would be the difference that they are paying for, not the basic education (basic as defined by a governmental agency with power to enforce this basic) which is a public good and so financed by the collectivity.

IV

Public Education and Minorities

DO WE THEREFORE CONCLUDE that it is only the rich, who send their children to prep schools, who are the financial victims of this confusion?

⁹ The proposal that the consumption, rather than the production, of education be subsidized in order to solve the problem of education in Pakistan was made by Coldwell Daniel 3d, "Allocation of Resources to National Education in Pakistan," *Indian Journal of Economics*, 41 (January 1961), pp. 291-95.

¹⁰ The foremost work espousing the public financing of private education is by Friedman. In his work, a straw man of a laissez faire educational system, whereas the relevant comparison is between a regulated industry and a nationalized one. Or they posit an idealized version of the public school system that seems a bit old fashioned in view of the current situation (see for example the writings cited in footnote 15). Two such critics of Friedman are Charles S. Benson, *op. cit.*, pp. 320-32 and Jerry Miner, *op. cit.*, pp. 24-26.

Or is there a "cost" even to some of those who now use the public schools? The answer is that there is a cost and the cost is in terms of the limited alternatives available to the child. The private school as an alternative is effectively denied to the child from a low income family due to a cost differential that cannot be fully explained by our rationale for free universal education.

When we decide that something is a public good, or is a good that has public aspects, we simultaneously decide that government should enter the private market in order to change consumers' choices between this good and other goods. By a tax or subsidy it should modify what would have been the relationship of the strictly private costs of production, drive a wedge between the costs of production and the costs to the consumer, in order to bias the purchase of the public good.¹¹ As we have decided that education is a public good the relevant wedge for government to drive is between education and other types of goods. That is, government's role is to lower the cost of education relative to other goods so that the consumer making choices in the market would choose that amount of education which is socially optimal. (That this will require an element of compulsion has been previously pointed out.) If government introduces additional wedges in the name of education it is moving away from a socially optimal situation by a distortion of choice patterns that has no explicit rationale. Such a wedge is driven in the public good category when education is financed at certain schools but not at others. By looking at governmental financial activity it would seem that only the public school education is the public good,¹² but the legal aspect of compulsory education makes it apparent that it is education itself that is the public good.¹³ Thus the governmental act that changes the cost relation of private and

¹¹ An excise tax is, of course, just the opposite of a subsidy for a particular good. It too inserts a wedge between private cost and price but here the wedge would effect a bias against the purchase of the good.

¹² James Bryant Conant in his *Shaping Educational Policy* (New York: McGraw-Hill, 1964) is a strong advocate of the public school as a public good because of its democratizing effects (see pp. 2, 39, 45, and 127), but the facts as stated in his *Slums and Suburbs* (New York: McGraw-Hill, 1961) seem to belie his argument. And his statement in the "Introduction" (p. 1) of *Slums and Suburbs* "that to a considerable degree what a school should do and can do is determined by the status and needs of the families being served" (original in italics) fits in well with the theme of this paper.

¹³ The full equation of the public good "education" with the public schools would lead to a demand for the outlawing of the full-time private school. The State of Oregon did in fact try this, but it was declared unconstitutional by the Supreme Court in 1925. See James B. Conant, *The Child, the Parent, and the State* (New York: McGraw-Hill, 1959), note 9, pp. 150-52.

public education imposes an excess burden on the consumers of education in the aggregate.¹⁴

The family that would choose public school education even in the absence of the cost differential remains economically unaffected. But the burden is excess on all the others—those who actually do choose a private school education as well as those who would have chosen a private school education if the cost differential of the public school subsidy were not there.

The former—those who choose the private school education—fall into two categories. In the first are the wealthy whose financial situation is such that the extra cost is a minor element in their total expenditure pattern. They may send their children to a private school because they are genuinely convinced that it is educationally superior or simply for its snob appeal. But we need not overly concern ourselves with their excess burden—though it is still there in principle—because relative to the income of the individual it is insignificant.

The second category is composed of families whose income is low enough for the excess burden to make a significant difference. These are families that send their children to private schools because of a difference in the type of education that these schools provide. If it were simply a matter of giving the student a quantity of educational material in addition to his public school education the matter could be settled without any problems by special classes outside of public schools hours. And this is done quite commonly not only in music classes but in religious instruction as well. The problem however lies in the situation where the parent feels that the additional education he desires for his child cannot be given separately from the general curriculum and thus implies a wholly different course of education. This is most obvious in the case where the addition is qualitative rather than quantitative or even if quantitative implies selective additions to the basic curriculum rather than simply an extra curricula subject. But it is also true for many parents who feel that religious instruction must be integrated into the learning process and therefore that a purely secular course of study is inconsistent with their concept of a proper education. (It should be noted, especially in this last case, that the secular knowledge would be taught—the State has the legal authority to see to this and admits to it being taught when it does not prosecute parents of children in religious school for violation of compulsory education laws.) Thus a divergent view of what the process of education entails,

¹⁴ The literature on excess burden has been developed primarily in regard to excise taxes (see footnote 11). The relevant literature is cited in Musgrave, *op. cit.*, p. 141, fn. 1.

even though coupled with complete agreement as to the nature of the specific public good, results in an individual paying for what is deemed by society to be a public good and which it has accepted as being worthy of public financing.

The latter group can be further divided into two parts. The first is composed of families similar to those in the second category above, but whose income is just a little lower, or who value the private school educational differences just a little less, so that they make the choice in favor of the public school. They too bear an excess burden—not in terms of dollars, but in terms of the inferior (in their minds) education being received by their children.

But perhaps most important of all are the families that choose public school education because for all practical purposes that is their only choice. They do not have the income to send their children to private schools and because they are members of a minority characterized by low income, schools that reflect their needs and values simply do not exist. Books such as Jonathan Kozol's *Death at an Early Age*,¹⁵ (rather dramatically subtitled *The Destruction of the Hearts and Minds of Negro Children in the Boston Public Schools*) chronicle the effect on children of minority groups of an educational environment that reflects the values of the majority.¹⁶ Public education which has characteristically been viewed and defended as democracy in action takes on the appearance in these books of class legislation.

V

Conclusion

TO SUM UP: The rationale for universal free and compulsory grade school

¹⁵ Boston: Houghton Mifflin, 1967. Kozol's book, which relates his experiences during his year's tenure as a substitute teacher, won a National Book Award for 1968. Herbert Kohl, *36 Children* (New York: New American Library, 1967) and James Herndon, *The Way It Spozed to Be* (New York: Simon and Shuster, 1968) are in the same vein and likewise the result of personal experiences. Kohl's *36 Children* were in the New York City schools and Herndon was a teacher in Northern California. A more scholarly report, by the Columbia University Teachers College (A. Harry Passow and others, *Toward Creating a Model School System: A Study of the Washington, D. C. Public Schools*), contains similar comments about the children in the schools of our nation's capital. The whole question of educational opportunities for minorities was examined in a report by James S. Coleman, *Equality of Educational Opportunity* (Washington: Government Printing Office, 1971). This report was commissioned by the Office of Education based on its interpretation of a directive in the Civil Rights Act of 1964.

¹⁶ An attempt to meet this problem in the context of the public school system is seen in recent proposals for decentralization in New York City and Washington, D. C. The proposals for New York were contained in a Ford Foundation-sponsored report chaired by McGeorge Bundy (*Reconnection for Learning: A Community School System for New York City*, published for the Mayor's Advisory Panel on Decentralization of the New York City Schools). The Washington proposals are contained in A. Harry Passow, *op. cit.*

education is based on the public nature of this good. There are benefits that accrue to a society that has universal education in addition to the benefits directly obtained by the individuals being educated. But the public nature of education does not provide a rationale for government production, as opposed to financing, of education. This has been an historical accident, the result of the administrative inability to separate production from financing. The effect of this has been the financial penalizing of that segment of the population that has chosen to educate their children in other than a governmental enterprise. They have been penalized in the sense that they have paid a higher price for education that was primarily the result of the way in which education is financed rather than being due to any difference in the product. (The reasons for choosing the non-governmental education are based upon the individual's judgment as to the value of the difference in the product.)

But the penalty is not merely borne by those who send their children to private schools. There is an implicit burden borne by those families who would have sent their children to a private school if the cost differential represented solely the difference in cost of production. Thus the discriminatory consequences¹⁷ of our methods of financing elementary school education are not directed solely at the wealthy or recalcitrant religious minorities or the social snob (or bigot), but at all minority groups, *i.e.*, groups whose values differ from those of the class that determines the curriculum and the values that are taught in and permeate the public school system.

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¹⁷ Perhaps it should be noted that the argument is simply that the current method of financing grade school education is discriminatory and that the concept of education as a public good does not provide a rationale for this discrimination. It does not contend that discrimination is in itself inherently either irrational or bad—this argument would have to be on the grounds of the particular discriminatory behavior and not about discrimination *per se*. Thus we could accept the thesis of this paper and then go on to argue for subsidies ("income redistribution in kind is needed in order to move toward equality of opportunity") or penalties ("private schools are asocial") for minority education.

Children and the World's Future

THE WORLD'S FUTURE depends on children. Unless they receive the care and education they need, they will not be able to grow into useful productive adults. The United Nations Children's Fund helps the world's children with aid to education. When you help UNICEF you are buying life insurance for the world.

World Aid in the Lives of 3 Children

TO REALIZE what a difference UNICEF aid can make in a developing country, consider the short lives of three children in India: Laxmi, Parvathi, and Ahmed. Only three out of India's 87 million one-to-five year-olds, the most vulnerable of that impoverished country's population.

Three-year-old Laxmi, of Yelliyur village in south India, is one of the lucky ones. Her family has a few acres of land and by village standards is moderately well off. Even so, her older brothers and sisters got off to a poor start—they were sickly, small for their age, and when they started at the village school, they didn't seem to learn.

Laxmi will do better. A few years ago a pre-school center, or *balwadi*, was started in her village under the UNICEF-assisted applied nutrition program. Laxmi goes to the *balwadi* every morning. She sits with the other children and plays games and sings songs. At eleven o'clock she gets lunch—a special pre-schooler's lunch, based on a corn-soy mixture supplemented with fresh vegetables. Laxmi is several inches taller than her brothers and sisters were at her age. She is bright-eyed and lively.

Two-and-a-half year old Parvathi is not as well off as Laxmi, but she's still lucky. There wasn't a *balwadi* in her village, and when she was weaned, her mother put her on the regular family diet—rice and chilies with occasionally a little candy as a special treat. Parvathi hardly gained weight at all and she began to have trouble seeing when dusk set in.

Finally, her mother took her to a UNICEF-aided nutrition clinic in the city of Hyderabad, about twenty miles from their village. The doctor took one look at the child's eyes and checked her into the hospital at once. She was suffering from an acute Vitamin-A-deficiency eye disease and would have gone blind in a few weeks. Massive doses of UNICEF's Vitamin A saved Parvathi's sight.

Young Ahmed, about the same age, didn't make it in time. His mother died when he was born. His father, a gnarled old peasant with several other children to look after, nursed him on buffalo milk. When Ahmed was a year old, his father stopped giving him milk, which was expensive, and switched him to rice gruel. Gradually Ahmed's eyes, too, began to go bad.

At last, the old man took the child into Hyderabad, 200 miles away, walking most of the distance. By the time they got there, Ahmed was blind. There was nothing to do. The UNICEF-trained doctor told Ahmed's father to give him green vegetables for his general health and sent them home again. The green vegetables, a few months earlier, might have saved Ahmed's vision as well. [From the U.S. Committee for the United Nation's International Children's Emergency Fund.]

Urban Racial Minorities and Immigrant Groups: Some Economic Comparisons

By MARTIN T. KATZMAN*

ABSTRACT. In a previous paper, a model explaining differences in economic performance of several predominantly white urban immigrant groups was developed. The present study extends this model to six racially distinctive minorities. It is found that the performance of these minorities does not conform well to the immigrant model. Tentative explanations in terms of discrimination and subculture are suggested.

ALTHOUGH WELL CATALOGUED, the differences in economic performance among members of different urban ethnic groups are poorly understood.¹ In an exploratory study we developed a model to account for differences in occupation, income, unemployment, and labor force participation among several immigrant groups in the nation's largest metropolitan areas in 1950.² The present study tests whether the same explanatory model accounts for the performance of six racially distinctive groups, with relatively severe economic problems: Negroes, Mexicans, Puerto Ricans, Chinese, Filipinos, and Japanese.³ The crucial issue is whether the problems of these groups are reducible to the problems common to all urban immi-

* This study was sponsored by the Committee on Urban Economics for the Future, Inc., through UCLA, and the Division of Social Sciences, University of California, Irvine. I want to thank my wife, Arlene, for help in preparing the data. A great debt is due Charles Tilly, Martin Levin, and Frank Mittelbach for their constructive criticism of my efforts, and Leland S. Burns for the opportunity of presenting these ideas at his seminars. All errors remain my responsibility.

¹ An ethnic group is defined as a group of individuals of common racial, religious, and/or national ancestry. It has no organic connotation or implications that individual members act collectively or identify with each other. For a catalogue of ethnic characteristics, see Niles Carpenter, *Immigrants and Their Children*, 1920. Census Monograph VII (Washington, D.C.: Bureau of the Census, 1927); E. P. Hutchinson, *Immigrants and Their Children, 1850-1950* (New York: John Wiley, 1956); Calvin F. Schmid and Charles E. Nobbe, "Socio-economic Differentials Among Nonwhite Races," *American Sociological Review*, 30 (December 1965), pp. 909-21; Stanley Lieberson, *Ethnic Patterns in American Cities* (New York: Free Press, 1963); Donald Bogue, *The Population of the United States* (Glencoe, Illinois: Free Press, 1959), chap. 14.

² Martin T. Katzman, "Opportunity, Subculture, and the Economic Performance of Urban Ethnic Groups," *Am. J. Econ. Sociol.*, 28 (October, 1969), p. 351 ff.

³ We refer to these groups as racial minorities in contradistinction to white ethnic groups which we refer to as "immigrants." For stylistic grace we refrain from hyphenating any nationality, as it is understood that all are residents or natives of the United States.

grant groups, or conversely, whether the problems of these groups are unique.⁴

I

Conceptual Scheme

AS BEFORE, we are interested in explaining inter-ethnic differences in occupation, income, unemployment, and labor force participation. These aspects are systematically related, occupation influencing income and unemployment, which in turn affect labor force participation. Exogenous influences on the economic performance of an ethnic group are urban opportunities, its demographic composition, its subculture and the discrimination it faces.

Each metropolitan economy presents a distinctive set of labor demand opportunities to its inhabitants. Since ethnic groups are not uniformly distributed among metropolitan regions, they face in the aggregate different opportunities.⁵ The racial minorities considered here differed markedly in their regional distribution in 1950 as they do today; the Orientals concentrating on the high-wage Pacific Coast; the Mexican-Americans, in the booming Southwest; the Negroes, in the low-wage Southeast; and the Puerto Ricans, in New York City.

The effects of age composition and educational status on economic performance are well known. A lesser known demographic characteristic, relative size of group in the metropolitan area, was discussed in the exploratory study. Negroes, Mexican-Americans, and Puerto Ricans have younger, less educated members on the average than the immigrant groups, both factors generating lower economic status.

*Subcultural*⁶ and *discriminatory* differences may be hypothesized to overwhelm any similarities between the European immigrants and the

⁴ Karl and Alma Tauber, "The Negro as an Immigrant Group," *American Journal of Sociology*, 69 (January, 1964), pp. 374-82, on the basis of segregation patterns in Chicago suggest that Negroes are different from other immigrant groups. "There are no studies known to us which compare all nonwhites to immigrants over a wide range of socioeconomic characteristics, for many metropolitan areas."

⁵ See Wilbur Thompson, *A Preface to Urban Economics* (Baltimore: Johns Hopkins University Press, 1965) for a nontechnical description of the impact of differing urban opportunities. See Hutchinson, *op. cit.*, chap. 1-3; and Martin T. Katzman, "Economic Geography and Regional Economics, 1880-1960," *Annals of the Association of American Geographers*, 55 (1965), on the geographical dispersion of ethnic groups.

⁶ For a rigorous analysis of subculture, values, and perceptions, see Florence R. Kluckhohn and Fred L. Strodtbeck, *Variations in Value Orientations* (Evanston, Illinois: Row Peterson, 1961), chap. 1; "National Character in the Perspective of the Social Sciences," *Annals of the American Academy of Political and Social Sciences*, 370 (March 1967). We do not stereotype all members of an ethnic group as similar; however, we deem it plausible that dominant attitudes towards economically relevant choices are different among groups with historically different experiences.

racial minorities. Under this hypothesis the economic performance of the Negro, who has suffered the unique experience of slavery, and the Japanese, for example, who has suffered the unique experience of "relocation," cannot be explained by the same factors as immigrant performance. While we cannot measure subculture and discrimination directly here, we test for the existence of immigrant-racial minority differences, irreducible to common factors of opportunity and demography.

II

Method

WE ATTEMPT to explain differences in performance among ethnic groups by multivariate regression analysis.⁷ The data for the regressions are of two types.⁸ First, are 160 observations of white immigrant groups in 9 metropolitan areas.⁹ Second, are 49 observations of the six racial minorities for some 20 metropolitan areas.¹⁰

In the exploratory study of immigrants, regressions were performed for each of three age cohorts separately, age having critical impact on economic behavior. Unfortunately, metropolitan socio-economic data on Negroes and Orientals are not classified by age. Consequently, we introduce the percentage of each observed group in cohorts aged 14-24 and 45+, as control variables.

⁷ Since regressions performed on both additive and multiplicative (logarithmic additive) models yielded similar results, we chose the former for simplicity. One might argue that correlating traits of an ethnic group with those of a metropolitan area would give spurious results since a part is correlated with a whole. This objection is not serious since a single ethnic-generation in a city on the average comprises less than two per cent of the population; in the most extreme city, all ethnic groups put together comprise a total of only 40 per cent of the city population.

⁸ The only published source of comprehensive data with inter-city, inter-ethnic comparisons is the 1950 U.S. Census of Population, Vol. IV, Special Reports: 3A. *Nativity and Parentage*; 3B. *Nonwhite Population by Race*; and 3C. *Puerto Ricans in the Continental United States*. The 12 groups used in the regressions analysis are: British, Irish, Swedish, German, Russian, Polish, English Canadian, French Canadian, Czech, Austrian, and Norwegian, two generations each. Since there are not data for every group in every city, we have only 160 data points (80 each for foreign born and for their children).

⁹ The nine metropolitan areas are: New York-Northeastern New Jersey; Chicago, Los Angeles, Philadelphia, Detroit, Boston, San Francisco-Oakland, Cleveland, and Pittsburgh. These nine metropolitan areas contained 47 per cent of the nation's foreign stock (immigrants and their children) and 58 per cent of the urban foreign stock. Specifically, they contain a majority of the nation's Poles, Italians, Poles, Austrians, Irish, Chinese, Japanese, and Puerto Ricans as well as the largest urban concentrations of Scandinavian British, Canadian, German, Russian, Polish, English Canadian, French Canadian, Czech, Austrian, and Norwegian.

¹⁰ Of the six racial groups, there are generational breakdowns only for Puerto Ricans and Mexicans, but we know the approximate per cent of foreign born in the remaining groups. Again all groups are not observed in all cities. About half of the observations of Negroes and Orientals are from smaller metropolitan areas not used in the regressions—e.g., Denver, Seattle. There is apparently no city size effect on the magnitude of residuals.

Analysis of Covariance

To test whether the same explanatory model applies to both immigrants and racial minorities, we pool the two types of observations, perform a set of least square regressions, and compute the sum of squared residuals. We compare these sums to those obtained when regressions are performed on the two types of data separately. An analysis of covariance shows that the two sets of data are not from the same population. In other words, the set of equations describing immigrant performance differs by at least one coefficient per equation from that describing minority performance.

Testing the Immigrant Model

Two sets of residuals are obtained from the immigrant model regressions: 1) 160 based on immigrant data originally used in the regressions; and 2) 49 projections of minority data based on the immigrant model.

Summing the residuals for each particular ethnic group for each particular equation, over the several metropolitan areas, we test whether or not the residuals for any groups are significantly different from zero. If not, then residuals are randomly distributed and result from imprecision in the model. If, on the other hand, the residuals of a group significantly diverge from zero, we maintain that ethnic factors explain the variance. Whether these ethnic factors are interpreted as differences in taste or discrimination depend upon the equation and the group.

III

Regression Analysis: The Immigrant Model

THE IMMIGRANT MODEL based on age aggregated data resembles the exploratory model based on age specific data. Without reviewing our interpretation of the model, we list the independent variables in each equation which have significant (.025, one-tail) impact on economic performance.

A. Male Occupations

In general, the occupational structure of an immigrant group depends upon its educational level and opportunities in the metropolitan areas through which it is dispersed, (See Table 1). The more numerous in the older age cohort, the more white collar workers the group comprises. Foreign-born members of the group are less likely to have professional or clerical jobs, but are more likely to run businesses than their children.

The proportion of clerical-sales workers in a group is not dependent upon opportunities in the metropolitan area, but rather upon the propor-

tion of entrepreneurs in the group. Apparently, fewer professionals emerge from groups which are large relative to the metropolitan population.

Table 1

PERCENTAGES OF ETHNIC MALES IN SELECTED OCCUPATIONS

<i>Dependent-variable</i>	% Professional	% Managerial	% Clerical-sales
R ²	.86	.31	.77
standard error	1.74	5.52	2.94
constant	-1.14	-7.16	4.53
<i>Independent variables</i>	<i>b(154)</i>	<i>b(155)</i>	<i>b(155)</i>
% foreign born	-0.02	0.03	-0.05
% SMA in occupation	0.43	0.62	
% completing high school		0.26	0.24
% completing college	0.82		
% age 45 +	0.03	0.06	0.04
% group managerial			0.28
relative group size	-0.16		

R² = coefficient of determination, corrected for degrees of freedom

b = regression coefficient (degrees of freedom)

B. *Unemployment and Income*

The male unemployment rate of an ethnic group is explained by the aggregate unemployment rate of the metropolitan area, the educational level of the group, and the proportion of younger workers in the subpopulation. (See Table 2).

The median family income of ethnic groups is accounted for by the average wage level of the metropolitan area, the proportion of the group in white collar occupations, and the percentage of foreign born.

Table 2

UNEMPLOYMENT AND INCOME OF ETHNIC GROUPS

<i>Dependent variable</i>	% Male unemployed	Median family income
R ²	.45	.54
standard error	1.40	\$232
constant	-1.24	-\$945
<i>Independent variables</i>	<i>b(156)</i>	<i>b(156)</i>
% SMA unemployed	1.21	SMA income, med. 1.31
% completed high school	-0.04	% white collar 00.70
% age 14-24	0.06	% foreign born -0.18

C. *Labor Force Participation*

Labor force participation of ethnic males and females conforms to

rather well known influences.¹¹ Increased unemployment within the group tends to bring additional, secondary workers of both sexes into the labor force. Male participation is responsive to metropolitan demand as expressed by the wage and unemployment rates.

Female participation is responsive to the supply of female jobs, as reflected in metropolitan participation. Married men are more likely, married females less likely to work than the unmarried. Finally, participation varies with age, the older of the immigrant generation being especially unlikely to work.

Table 3

LABOR FORCE PARTICIPATION RATES, BY SEX

<i>Dependent variable</i>	<i>Male</i>	<i>Female</i>
R ²	.85	.73
standard error	2.46	4.25
constant	62.75	14.03
<i>Independent variables</i>	<i>b(152)</i>	<i>b(152)</i>
% unemployed, males	0.44	0.49
median income	0.008	
% unemployed, SMA	-1.12	
% age 14-24	-0.21	(0.55)*
% age 45+	(-0.23)*	(-0.24)*
	-0.21	-0.17
% married	0.24	-0.16
% female participation, SMA		1.14
% white collar, male		-0.08

* foreign born generation

IV

Residual Analysis

THE RESIDUALS of the regression are first analyzed by the sign test. Every case in which the sign pattern of residuals is significantly different from that expected by chance is listed in Table 4. In most of these cases the mean value of the residuals is significantly different from zero.¹²

¹¹ William Bowen and T. A. Finnegan, "Labor Force Participation and Unemployment," in A. M. Ross (ed.), *Employment Policy and the Labor Market* (Berkeley: University of California, 1967), pp. 115-61, find that the male participation rate in a city varies directly with the average wages in the city. We find that participation is more strongly associated with average *ethnic* wages ($r = .73$) than with average city wages ($r = .26$).

¹² For a given ethnic group, we find the number of residuals for a given regression which are positive. The test of significance for group i on performance measure j is:

$$t_{1j} = \frac{P_{1j} - \frac{n_j}{2}}{\sqrt{n_j (.5) (.5)}}$$

P_{1j} = number of positive residuals

n_j = number of observations on j

Findings

On average, the racial minorities diverge significantly from the performance predicted by the immigrant model, substantially more than the immigrant groups themselves. In general, they are underrepresented in the professions, underemployed, and underpaid. Several of these traits are shared with other ethnic groups. For example, the Irish are more

Table 4
ACTUAL MINUS EXPECTED ECONOMIC PERFORMANCE

	% Profess.	% Manag.	% Cler. Sales	% Unempl.	\$ Med. Income	% M. Labor	% F. Labor
British	(0.5)*		2.2	-0.9			
Canadian-English	2.9	(-2.1)					(1.6)
Irish	-3.7	-3.6	2.3		-167		
Swedish		-4.3	-2.0		(56)		
Norwegian		(2.2)		(1.2)			
German			-1.5	(-0.7)		(-0.9)	(-1.3)
Austrian				(0.7)			
Czech		-4.5					
Polish	-1.2		(-1.2)	(0.7)			
Russian	-1.2	11.1			147	(-1.0)	
Italian			(-0.8)	(0.2)		(0.9)	(-1.9)
Canadian-French		(-3.1)					
Mexican	(-1.3)	-5.4		3.3	-328	3.0	-6.1
Puerto Rican	(0.5)	(-3.8)	7.9	10.8	-875	-8.0	-18.1
Negro	-2.0	-4.7	-3.6	8.9	-1,198	5.1	
Japanese	-3.1	-7.9/5.2**			-1,300		8.9
Chinese	-3.0	9.6		3.2	-998	-5.3	-10.1
Filipino	-2.5	-8.9	(-2.0)		-847		-16.4

* Bracketed numbers-statistically significant on sign test, but mean insignificantly differs from zero.

** The positive number reflects the proportion of all businessmen, including independent farmers, in the group. The negative number excludes farmers.

underrepresented in the professions than any other group and are also underpaid.

As far as obtaining clerical and sales employment, the racial minorities present a mixed picture. The Puerto Ricans are apparently overrepresented, while Negroes and perhaps Filipinos share underrepresentation with Germans and Swedes.

If t is statistically significant (.10, two-tail), we next determine whether the mean of residuals is different from zero:

$$t_{.025} = \frac{\bar{r}_j}{\sigma_e / \sqrt{n_j}}$$

\bar{r}_j = mean of residuals
 σ_e = standard error of estimate

If t is statistically significant (.025, one-tail), then the mean residual approximately equals the dummy variable for that group in regression j . Conceptually, this would mean that "ethnic" factors are needed to explain the group's performance.

PS94

Negroes, Mexicans, and Filipinos contain few entrepreneurs as do several ethnic groups. On the other hand, the Chinese and Japanese, if we include farm managers, produce an extraordinary number of entrepreneurs, as do the Russians (mostly Jewish).

The only groups with significantly aberrant labor force participation patterns are racial minorities. Remarkable are the high rates of participation of Japanese females and Mexican males, and low rates for Chinese, Filipino, and Puerto Rican females.

Interpretations

In an earlier study we discussed discrepancy between actual and expected performance for the 12 immigrant groups and, to some extent, Mexicans and Puerto Ricans.¹³ We focus here on the six racial minorities.

Mexicans diverge the least from expectation among the minorities. Discrepancies in income and unemployment might be explained by discrimination. The high rate of male labor force participation is due to the importation of Mexican nationals as agricultural workers, since the native born generation participates normally. The especially low rate of female participation is explicable in terms of culture: either a direct expression of preferences or an indirect result of higher fertility, itself a reflection of culture.¹⁴

Puerto Ricans are by no means underachievers with respect to occupational status. It is not clear why their ability to earn income and secure employment is inferior to that of the Negro and Mexican who are no less discriminated against. High unemployment rates and low labor force participation rates might be due to the "welfare syndrome," a dependence upon the welfare bureaucracy cultivated by experience on the island.¹⁵ Recency of arrival is no explanation since in 1960 male participation rates for native born Puerto Ricans was lower than that for any other minority.

Negroes seem to be subject to severe discrimination in their inability to secure stable employment, white collar jobs, and high pay. The low rate of male labor force participation may be a symptom of discrimination, a problem we shall not discuss in this essay. Apparently female labor force participation, which in absolute terms is quite high, is explained by the inability of the male to achieve economically.

¹³ Katzman, "Opportunity, Subculture, . . .", *op. cit.*

¹⁴ William Madsen, *The Mexican-Americans of Southwest Texas* (New York: Holt Rinehart, 1964), chap. 6, suggests that a woman's working may be perceived as proof of her husband's inadequacy as a breadwinner or as a threat to her own virtue.

¹⁵ Glazer and Moynihan, "The Puerto Ricans," *op. cit.*

Japanese in 1950 were underpaid even more than the Negro, considering their levels of education. Racial discrimination, as manifested by the wartime "relocation," was probably responsible for the low level of income and low proportion of professionals. If one considers farmers as entrepreneurs, the proportion of businessmen in this group is astounding in view of the many liquidations caused by "relocation."¹⁶ Similarly, their lack of severe unemployment is surprising in light of discriminatory pressures. The community's willingness to provide work for all may be attributed to the intense value of independence of the individual and the unwillingness to enroll on welfare.¹⁷ The extraordinarily high rate of female labor force participation is undoubtedly a reflection of preferences.

Chinese are more like Negroes than Japanese in many aspects of their economic performance. Discrimination is probably responsible for their being underemployed, underpaid, and unable freely to enter the professions. Their response to discrimination, manifested by low rates of male participation, may reflect less aggressiveness as compared to the Japanese.¹⁸ Perhaps the relatively higher wages of the Chinese reflects a lesser willingness to hire uneconomical workers for the sake of reducing unemployment. The extremely low rate of female participation probably reflects the high value of the female role as homemaker.¹⁹

Filipinos are peculiar in the low rate of labor force participation of their females. This peculiarity is easily explained by the fact that males outnumber females 5 to 1 in the urban areas. With these odds, a Filipina could easily find a male whose relative wealth obviated the necessity of her working.²⁰

V

Conclusion

THE ECONOMIC PERFORMANCE of the six minorities considered diverges markedly from predictions based on the immigrant model. Whether such divergence results from preferences of these groups or discrimination against them cannot be determined solely on the basis of these data. A

¹⁶ Leonard Bloom, *Removal and Return: the Socio-economic Effects of the War on Japanese-Americans* (Berkeley: University of California, 1949). The recovery in the professions was as impressive as in business. While only 6.4 per cent of the males were in the professions in 1950, more than twice that share, 14.8 per cent, were professional by 1960.

¹⁷ Bradford Smith, *Americans from Japan* (Philadelphia: J. B. Lippincott, 1948) on the forms of work created by Japanese-American entrepreneurs to provide others with jobs, p. 17ff.

¹⁸ Rose Hum Lee, *The Chinese in the United States of America* (Hong Kong: University Press, 1960), chap. 8, 12, on aggressiveness in Chinese culture.

¹⁹ *Ibid.*, chap. 8, on female roles in Chinese culture.

²⁰ See Constantine Panunzio, "Intermarriage in Los Angeles, 1924-1933," *American Journal of Sociology*, 47 (1942), pp. 692-93, on Filipino attitudes towards women.

priori, it seems plausible that labor force participation patterns and managerial ability result mostly from culturally given norms and aptitudes.

The patterns in which the racial minorities diverge from the immigrant model are instructive. The three Oriental groups, who face less prejudice from the white population than the Negroes²¹ and a fortiori are reputed to be more achievement oriented, are expected to be considerably more successful. Surprisingly, our 1950 data only weakly support this hypothesis. The three Oriental groups are underpaid an average of \$1,050, suffer about one per cent more unemployment than expected, and are underemployed in the professions by 2.9 per cent. The Negroes are only slightly more underpaid (\$1,200), and slightly less underemployed in the professions (2.0 per cent). Only the Negro unemployment rate strongly reflects the relative disadvantage Negroes might face *vis-a-vis* Orientals in their subculture and burden of discrimination.

The Mexican-Americans who faced more discrimination than Orientals in 1950 were underpaid less and were not underemployed in the professions, nevertheless suffered a much higher unemployment rate. This mixed pattern might reflect differences in the willingness and capacity of these groups to look for work and make work.

By 1960 the pattern of achievement for these groups changed markedly. In terms of occupational attainment, the Orientals were *more* successful than expected on the basis of education and family background; in fact, they over-achieved more than any other ethnic group.²² Mexican-Americans and Negroes, however, are still the most severe underachievers in terms of occupation when these same factors are held constant.

What light do these findings throw on the effects of subculture and discrimination on the economic performance of racial minorities? By 1960 labor market discrimination against all minorities has probably diminished, to the point of vanishing for Oriental Americans and probably for Mexican Americans. The spectacular rise from underachievement to overachievement among Orientals between 1950 and 1960 may reflect the unshackling of dynamic subcultures from the shackles of prejudice.

²¹ Emory S. Bogardus, "Racial Distance Changes in the United States During the Past Thirty Years," *Sociology and Social Research*, 43 (1958), pp. 127-33, and *Race Relations* by Emory S. Bogardus, pp. 410-41, found that prejudice (racial distance) against all racial minorities diminished between 1940 and 1950, although the order of these groups in racial distance remained fairly stable. The relative prejudice of the average American against racial minorities in 1956 is suggested by the following distance scores: white Americans (1.08), Canadians (1.16), Italians (1.89), Jews (2.15), Japanese Americans (2.34), Mexican Americans (2.51), Negroes (2.74).

²² Beverly Duncan and Otis Dudley Duncan, "Minorities and the Process of Stratification," *American Sociological Review*, 33 (June 1968), pp. 356-64.

The under-achievement of Mexican Americans and Negroes, however, cannot be explained solely by prejudice. In a previous study,²³ comparisons of West Indian, Puerto Rican, and American blacks reveal wide differences in achievement. Similarly, we find that Puerto Ricans are considerably more mobile than Mexican Americans. Consequently, under-achievement must also be explained in terms of subcultural traits: attitudes towards work, saving, education, and fertility.

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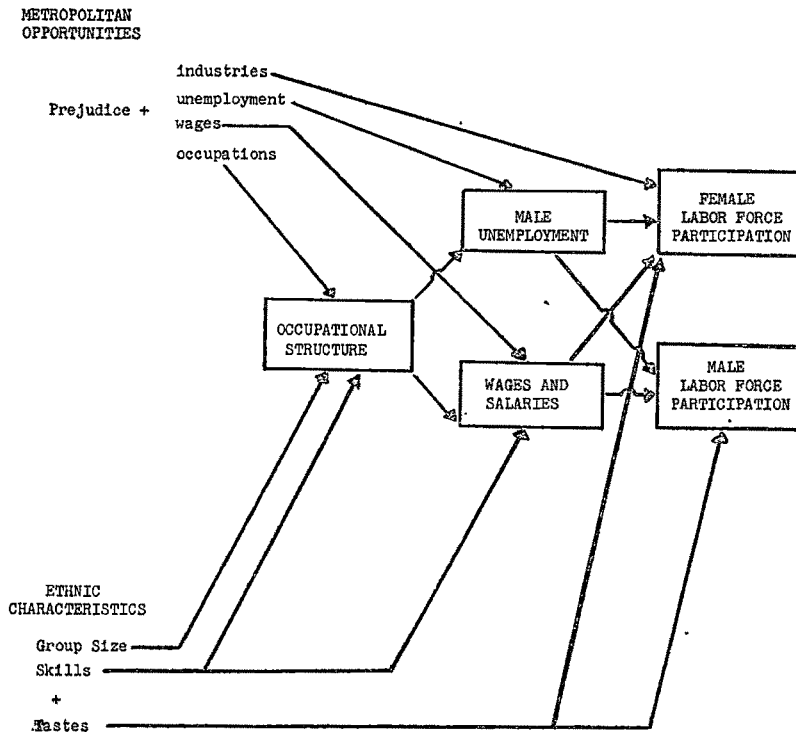


Figure 1. Model relating Metropolitan Opportunity, Ethnic Characteristics, and Economic Performance.

²³ Martin T. Katzman, "Discrimination, Subculture, and the Economic Performance of Negroes, Puerto Ricans, and Mexican Americans," *Am. J. Econ. Sociol.*, 27 (October 1968), pp. 371-75.

The Public Interest in Cable Television

A SPOKESMAN FOR public broadcasting has warned the nation's mayors that unless they plan now, and take bold action immediately, the enormous public benefits of cable television may be squandered. Speaking before the National League of Cities in Atlanta, Ga., on December 10, 1970, John W. Macy, Jr., president of the Corporation for Public Broadcasting, said that the educational and community service potentials of CATV are almost too startling to imagine, but that they are a clear and present possibility.

To assure that these potentials are preserved, Macy recommended to the mayors that they (1) consider building, where feasible, CATV systems for their cities as public enterprises, and leasing them to non-profit community corporations for operation; (2) consider their local public broadcaster as a possible operator of the system; and (3) provide, whether the franchise is municipally or privately owned, that 50 per cent of all cable channels be reserved for public uses.

Mr. Macy said that the decision to construct the systems as municipal enterprises "could have more lasting implications than any decision you will make as mayor. It will be well worth the investment in terms of financial return and public benefit." By building the system as a public utility, he said, the mayors can guarantee not only that the public retains control of this communications enterprise, but also that all or a good part of the profits can be rechanneled into the system for educational and community programming, thereby further insuring that the potentials of cable are recognized in these two areas.

"The most logical operator of the system," Mr. Macy said, "would be your local public broadcaster. There is no better way to insure that the public interest acquires a piece of the action and derives the maximum benefits of the cable system. I say this with the utter conviction that public broadcasting is capable, given the increased resources, of filling the greatly increased air time of the cable system with programming of quality and enlightenment."

To insure that the channels reserved for public uses are programmed in such a manner and with such quality that they will be of effective use, Mr. Macy said, the Corporation has recommended, in response to an FCC proposal, that cable systems be taxed 5 per cent of their gross subscription revenues, and the proceeds assigned to planning the non-commercial uses of cable and producing programming for the non-commercial cable channels. The FCC had proposed that the proceeds of such a tax be given to the Corporation to help support public broadcasting generally. [From the Corporation].

Programs for the Economic Development of the American Negro Community:

*The Moderate Approach**

By WILLIAM L. HENDERSON and LARRY C. LEDEBUR

Introduction

IN 1967 BAYARD RUSTIN noted that the civil rights movement had entered into a new phase. The new strategy and priority is the economic advancement of the Negro. In 1968, economic development programs advocated by Black militants were the significant events reinforcing the new "economic direction" of the Black leaders. Black militants, particularly in CORE, have been innovative in program design and resourceful in marshalling support and enthusiasm for broad-gauged economic development programs. Non-militant or moderate Blacks also renewed their earlier interest in an economics focus to solve basic Negro problems. Non-militant national Negro organizations have recognized the need for economic development and improvement but have concentrated their resources on legal issues. The non-militant civil rights groups created the necessary and sufficient conditions within the system that permitted the current economic thrust to occur.

The proposals for action in economic programs of the Negro moderates are the subjects of this article. There is an evolving emphasis on economic development and entrepreneurship programs as opposed to skills training and the creation of more employment opportunities. These embryonic programs are structured and developed well enough now to permit evaluation of their viability to meet the urgent needs of Black Americans who remain outside of the "mainstream" of the American economic system.

I

The Moderate Position

QUESTIONING THE STAFF of the National Business League (NBL) on the organization's economic ideas and historical influences, an interviewer re-

* In the October, 1970 issue of this *Journal*, the authors began a basic evaluation of the economic development programs of Negro leaders and organizations by assessing the programs advanced by Black militants. This article continues the study, but with emphasis on the moderates or non-militants.—EDITOR.

ceived this reply from one staff member: "We are pure Adam Smith."¹ This statement provides a basis for understanding the difference in the economic orientation of Black militants and moderates. The Negro moderates or non-militants have tied their own economic development to already established capitalistic institutions, rather than the establishment of separate unique Black economic entities.

The concept that guides the non-militant Negro is essentially an individualistic evolutionary development, through private enterprise institutions. Basic to this process is the idea of an "economic man" motivated by his material self-interest. The economic man is driven to improve his material condition. The 19th century classical orientation suggests that material acquisitiveness is a universal trait that identifies and unites all men. For the individual Negro, this orientation implies specialization in a productive skill, or job, or operation of a business. The acquisitive activity related to the skill or job and business operation permits participation in personal and economic growth.

Booker Washington's Legacy. Emphasis on entrepreneurship is well grounded in Booker T. Washington's ideas and philosophy. Washington was a vigorous advocate of the Negro effort to "make it" within the system. He stressed thrift, self respect, and persistent striving. Negro artisans, businessmen and property owners were the product of education and industrial training. His ideas and efforts constitute a legacy for modern Negro conservatives.

Washington's basic position was forcefully stated at the opening of the Cotton States Exposition in Atlanta in September, 1895.

To those of my race who depend upon bettering their condition in a foreign land, or who underestimate the importance of cultivating friendly relations with the Southern White man who is his next door neighbor, I would say: "Cast down your bucket where you are"—cast it down in making friends, in every manly way, of the people of all races by whom we are surrounded.

Cast it down in agriculture, mechanics, in commerce, in domestic service and in the professions. And in this connection it is well to bear in mind that whatever other sins the South may be called to bear, when it comes to business, pure and simple, it is in the South that the Negro is given a man's chance in the commercial world. . . . We shall prosper in proportion as we learn to dignify and glorify common labor, and put brains and skill into the common occupations of life; . . . No race can prosper till it learns that there is as much dignity in tilling a field as in writing a poem. It is at the bottom of life we must begin, and not at the top.²

¹ Interview.

² Roy L. Hill, *Rhetoric of Racial Revolt* (Denver, Colorado: Golden Bell Press, 1964), p. 39.

Five years after this speech Washington aided in founding the Negro Business League to promote Negro businesses, the predecessor of the NBL.

The National Business League. The recurring theme of Washington—that the “black man who was succeeding in business, who was a taxpayer, and who possessed intelligence and high character . . . was treated with the highest respect by members of the white race”³—pervades the programs advocated and implemented by the modern National Business League.

The following is a restatement of Booker Washington’s early ideas by B. G. Burrell, president of the National Business League, to community leaders of Memphis in June, 1968:

This is a dollar society. A business world. A profit-making culture that places the highest premium on success in business and profit making. Every man in this country is measured by his peers on the basis of his relative economic success.

The news vendors on the street corners are respected and looked up to by their peers because they are ‘in business for themselves.’ The captains of industry, the high and the mighty of the world of business enjoy the greatest degree of admiration—indeed—adulation—as a result of their profit making skill.

. . . Each and every businessman is revered by the small sample population that knows him primarily because he is in ‘business.’ Every strata of our society holds the business functionary in great high regard and accords him an inordinate amount of respect.

In the light of these facts it would seem that only elementary common sense would be required to point up the need for an entrepreneurial class of indigenous citizens.

The NBL is dedicated to the development of the economic base and Negro business leadership to achieve economic, political, and social equality. The NBL seeks (a) an acknowledgement of the right of all Americans to enter business, (b) equal access to capital, and (c) the partnership of government and private enterprise in providing technical assistance to supplement the initiative of potential successful businessmen.

The NBL does not advocate a separate Black economy.

We hold the opinion that a concentrated effort to develop an area of significant Negro participation as employers in the aggregate economy of the nation is essential to meeting both the grievances of Black Americans and the requirements for maximum economic growth by the national economy.⁴

The NBL is the pre-eminent advocate of minority entrepreneurships.

³ See Proceedings of the National Negro Business League, 1900, and Earl E. Thorpe, *The Mind of the Negro: An Intellectual History of Afro-American* (Baton Rouge: Ortlieb Press, 1961), p. 422.

⁴ *Operations Manual for Project Outreach* of the National Business League, p. 4.

NBL activities are designed to aid the Negro in becoming a self-sufficient businessman and entrepreneur. Skills training and more jobs are subsidiary concerns of the NBL.

It is an article of faith with us that the free entrepreneurship system that is an American trademark is directly and indirectly responsible for all of the good things that have inured to our citizenry. *We want to become a truly meaningful part of the system. . . !* We do not want a *hand out* but we need and seek the warm right hand of fellowship that only our White contemporaries can provide us. Give us nothing but *loan us* what we need. Money, guidance, counseling, know-how, are all professional commodities that should be available for a price. We ask only that the price be reasonable and equitable.⁵

The organization's programs are professionally developed and formally structured. Entrepreneurship opportunities of Negroes are currently enhanced by the NBL's *Mainstream* and *Outreach* projects. These interlocking projects underwrite the NBL philosophy of self help and "the partnership not plantationism" doctrine.

Project *Mainstream* is a composite five-point program that coordinates existing government programs in a cohesive manner to achieve economic growth and development. The program is designed to make local citizens an integral part of the urban development process through (a) the creation of Small Business Investment Companies to provide equity capital resources for indigenous businesses; (b) the creation of "local" or "state" Development Companies to facilitate the development of the physical plants and equipment for the local enterprises; (c) establishment of Urban Development Foundations that seek participation by community organizations in the development process; (d) providing basic training for entrepreneurship as a prerequisite for more advanced training; and (e) setting up and operating data processing business reporting and accounting control system to bring to the local businessman services of this type that he could not afford.

The NBL brochure describing Project *Mainstream* notes:

The principle of self-help is and always must be paramount in all our efforts. While the deprived entrepreneur must receive reasonable assistance from the total community it must be clearly understood and fully appreciated that neither *Mainstream* nor any other NBL program aims at replacing individual's own initiative, diligence, physical exertion and financial sacrifice.⁶

⁵ Speech by Berkeley G. Burrell, "If not Now, When? If not us, Who?" before the Mount Vernon Avenue Improvement Association, Columbus, February 8, 1968.

⁶ Project *Mainstream*, brochure by the National Business League, 3418 Georgia Ave., N.W., Washington, D. C. 20010.

The self-help, individual idea permeates all NBL projects. Project *Outreach*, for example, is primarily directed toward the most disadvantaged owners of small businesses. Services of management training, business counseling and the preparation of basic financial records are provided for the owners of small businesses. The management assistance program is the most important feature of the *Outreach* effort. ". . . The major problem confronting small business operators is their own management deficiencies."⁷ The management assistance program is designed to attack this basic deficiency by developing and implementing orderly and rational approaches to small business problem-solving. The NBL hopes to organize more small businesses, to set up alternative forms of business organization, and to foster cooperative activities for small inefficient firms.

The NBL also is engaged in 12 cities under a federal government contract in a pilot program of basic business education, management training, guidance and counseling. The modest goal is to provide 40 persons capable of successfully holding management training jobs, 250 persons who will open sound new businesses, and 500 entrepreneurs whose business activities will show measurable improvement. *Outreach* is taking the first step in identifying persons interested in going into business and is providing preliminary training and technical assistance and advice to get them into business. *Outreach* also sets up the basic mechanics for providing business training and technical advice so that these Negro businessmen can meet competition and experience normal growth of their businesses.

The NBL also provides other services for budding Negro entrepreneurs. One current program is the development of franchises. The Franchise and Business Opportunity Analyst of the NBL is responsible for locating and identifying viable franchise opportunities and establishing the reputability of the originators. Work has been done with A. W. Willis and others to develop a franchise package on a national basis for Mahalia Jackson-Glori-Fried Chicken. The franchise concept is, of course, particularly constructive because it can provide complete advice and guidance on all of the services, and skills necessary to establish and operate the enterprise. There is standardization of physical facilities, inventory control, accounting, and other functions.

The scope of the programs offered by NBL is extensive and includes housing and urban development as well as economic development and entrepreneurship assistance. The "modular core" concept is a \$75 mil-

⁷ *Operations Manual for Project Outreach*, op. cit., p. 14.

lion housing and business development plan advocated for every ghetto in the NBL's 50 chapter cities. This plan is an overall blueprint for the revitalization of urban blighted areas. The "core" contains a housing, business, and public service mix. The major elements are a new housing environment, shopping center, and a community center. On the periphery of these modular cores, provision is made for light manufacturing and warehousing.

Within this new core we would create a new economically stratified housing environment, a new diversified shopping environment and a new governmental services or civic environment. During the process of physically erecting the core, we would involve every element in our moving vibrant community. We would train the able bodied in skills that are marketable as they rebuild an area they can identify as their own. We would create a class of entrepreneurs by the merging of White resources with minority capability. We would maximize the benefits of government social programs by making them productive of meaningful social benefits.⁸

The modular core approach attacks many of the basic problems of the inner city, *i.e.*, over-population, shortage of housing, high rates of unemployment, increasing cost of crime prevention, and the exodus of industries and thus jobs to the nearby suburbs. The NBL believes that social amenities and community protection must be provided so that the central cities will be a desirable place for employers to locate, employees to work, and everyone to live.⁹

Small Business Development Center. Another small organization which directs its efforts to provide practical advice, counseling, and training for the small Negro entrepreneur is the Small Business Development and Guidance Center (SBDGC) at Howard University. Although Wilford White, the director, is not Negro, the assistant director, French Stone, is a very successful businessman. The chairman of the advisory group for the SBDGC, F. Naylor Fitzhugh, is a former Howard University professor and now a vice president of Pepsi-Cola.

Fitzhugh characterizes the essential orientation of the advisors of the SBDGC as "economic development within the system."

We have definitely accepted American standards, American goals. We wanted to achieve within the American frame of reference. It has been my experience that as far as Black businessmen are concerned, they had a great deal more faith in business as a philosophy of life and as a means to salvation. As a matter of fact, I used to criticize businessmen's asso-

⁸ B. G. Burrell, statement presented to the Joint Economic Committee, Congress of the U. S., June 5, 1968.

⁹ Statement on Inner City Economic Development, Project *Outreach*, 4324 Georgia Avenue, N.W., Washington, D. C., p. 1.

ciations. I used to say if you would stop trying to save the Negro race and start saving your businesses, the association would make more sense. . . . They were 110 per cent committed.

. . . I have had several people say to me, keep talking about the Negro middle class. Why stay middle class. There's nothing wrong with our getting wealthy. If we have 10 per cent of the population, let's have 10 per cent of the multi-millionaires.¹⁰

In discussing the programs of the Small Business Development and Guidance Center, A. S. Venable underscored the Washington-Burrell-Fitzhugh development orientation.

We strongly believe that economic organization of minority group owned businesses represents an effective means of setting in motion self-perpetuating machinery which will allow the Negro community, eventually, to function and grow on its own as a vital part of the total business community.¹¹

The purpose of the Center is to expand employment in small business firms by providing management assistance to small businessmen located in metropolitan Washington, Baltimore, and Richmond. Since 1964 the Center's assistance has been offered through two primary programs: (a) individual and (b) group counseling and training. Emphasis has been placed on administrative and operating problems such as record keeping, marketing, personnel, housekeeping, location, and relations with taxing and regulatory agencies. Financing and loans are not emphasized unless the needs of a business call for a loan and the owner is qualified to manage the money successfully.

In 1966 the Economic Development Administration funded a program organizing dry cleaners into a self-help group. Other services such as automotive repair, day nurseries, rug and upholstery cleaners have also been organized in similar groups. The counseling effort involves a few enterprisers and a leader meeting to discuss problems of the owner, employees, markets, money, and methods. But the scope of the program is limited by facilities and funds. During the 1967 fiscal year classes were held for 17 organized groups with about 260 people enrolled. The number of people affected is relatively small when compared with other national organizations.

Urban League Programs. Whitney Young as a spokesman for the Urban League reflects the "within the system, jobs oriented, upward mobility" commitment of that large organization. The work of the

¹⁰ Interview with F. Naylor Fitzhugh, Vice President, Pepsi-Cola, Inc., New York City, July 18, 1968.

¹¹ Abraham S. Venable, "Mobilizing Dormant Resources: Negro Entrepreneurs," remarks made available by the Business and Defense Services Administration, May, 1967.

Urban League since its incorporation in 1913 has been primarily concerned with the Negro's advancement in business and industry. The purpose of many Urban League programs has been to improve training and productivity and thus the Negro's opportunity to find jobs and to improve his chances of being promoted to higher paying jobs and to assure him equal pay for equal work. Although the League has a general policy of improving urban conditions, it has emphasized skills training and job placement.¹² The Urban League has carried out a major role in program development and planning of on-the-job training programs implemented by Urban League affiliates and funded by the Department of Labor. In terms of the number of people participating in funded programs, the Urban League's activities are the most significant of all Negro groups. For example, in 1966, 4,000 people received training and job placement, while over 40,000 people took advantage of its job placement services.

The Urban League has relied on the federal government for financial aid, as have all organizations with working programs. Mr. Young has advocated a guaranteed annual wage and the use of the government as an employer of the last resort. He has also supported the A. Philip Randolph proposal called the "Freedom Budget" as a source of funds to finance massive programs in housing, education, health, and employment improvement.¹³

Improvement in employment conditions, higher pay, and emulating the White privileged group in economic acquisitiveness is advocated in the programs and administrative policies of most of the national Negro organizations.

The NAACP Approach. Although the NAACP does not have a well-developed economic program, upward economic development of the Negro is a functional aspect of the long-term drive for civil rights. William Morris, who is director of housing programs of the NAACP, states that Economic development to me means the development of Negro entrepreneurship, the development of Negro businesses where they can have some degree of economic independence, and opening up the upward mobility of Negroes into the general level of management and sub-management positions where they can participate fully in the mainstream of business and economic life.¹⁴

¹² See Benjamin Mays, *The Negro's God* (Boston: Chapman and Grimes, 1939). Statements by Whitney Young in *Federal Role in Urban Affairs*. Committee on Government Operations, U. S. Senate, 89th Congress, December 14 and 15, 1966, pp. 2921ff. (part 14).

¹³ See *Federal Role in Urban Affairs*, Part 14, *op. cit.*, pp. 2932-40.

¹⁴ Interview with William Morris, NAACP Offices, New York City, July 17, 1968.

Mr. Morris prefers the private business sector as a source of aid and advice for the evolving Negro entrepreneurial group. "The role of private industry in this would be one I would first pursue because I think they are able to move much faster, they are not complicated by the bureaucracy, the tight regulations of federal operations, they can move more freely, make their own decisions and they could be very instrumental in getting any program off the ground."¹⁵

The Southern Christian Leadership Council. A moderate civil rights organization that until recently offered inspired leadership to a large segment of the Black Community is the Southern Christian Leadership Conference. In the six months before his death, Martin Luther King had begun to implement a generalized economic program to direct attention to the "poor people." Dr. King's successor carried through the plans for the "Poor People's Campaign" in Washington to attract national attention to the plight of minorities. Other than the national attention element, it is difficult to determine the economic goals and objectives of the SCLC.

In testifying before the Subcommittee on Equal Opportunity in an Urban Society at the Republican National Convention (1968), Dr. Ralph Abernathy noted the need to expand numerous government programs, such as the food stamp plan, Head Start and summer jobs under the OEO, welfare programs, and other income maintenance programs, model cities, low income housing, and economic development programs in rural areas. The SCLC has originated no specific programs. It is difficult to evaluate the omnibus thrust advocated by Dr. Abernathy. There are elements of the older skills training and employment opportunities approach, as well as an elementary concept of economic development applied to rural areas.

Recent pronouncements from this group add little substantive information as to the appropriate manner to deal with the problems of the SCLC constituency. In a United Press International dispatch of January 9, 1969, Dr. Abernathy is reported to have said that he was not interested in making Black individuals rich, but in helping groups.

We need to organize community owned development corporations where profits will be returned to the building of the community. . . . We want to share in the public sector of the economy through publicly controlled non-profit institutions. I don't believe in Black capitalism. I believe in Black socialism.

Although considered a moderate, Dr. Abernathy has made recent state-

¹⁵ *Ibid.*

ments which appear to be inconsistent with the ideas and programs of other non-militant organizations.

II

The Capital Dimension of the Programs

ONE CHARACTERISTIC of all of the programs noted in this review is "newness." With the exception of selected "jobs oriented" programs of the Urban League and selected NBL activities, the programs are in the planning or formulation phases. A secondary characteristic of all of the programs is the need for financing. The money capital necessary for successful implementation of the programs becomes the principal impediment to getting the programs moving. The need for money or the need for the control of purchasing power over resources is a fundamental prerequisite in all capital development programs whether in the American ghetto or in other areas of the world.

Capital accumulation is inexorably entwined in the folklore and formal analysis of economic development. The process of raising income and speeding wealth accumulation is a function of the capacity of the individual and the system to exert economic power to substitute machinery for human motive power or to increase purchasing power over resources. The capital scarcity syndrome with its inherent restriction on economic accretion and expansion has been applied to Negro economic problems in the United States.

The vicious cycle of poverty income is a generalized explanation of the fate of many individual Blacks. If incomes are low, all of the income is committed to subsistence purchases or for debt retirement. No economic accretion occurs. In the entrepreneurship cases, the Black businessman is typically in the services and his sales volume is relatively low. The business organization is invariably a proprietorship or partnership. The small volume, labor intensive, limited market, and high risk elements have created credit limitations to supplement others already at work in the money market.

Attempts to isolate and identify problems of capital formation or financing as the fundamental causal factor in the failure of the Black community to develop are problematical. Capital formation is, however, a salient factor in the pattern of permissive factors which would aid in current and future economic development. Problems such as skills training, discrimination, limited markets acquisitive motivation, management acuity, geographic mobility, and entry barriers other than capital interact

with capital problems in Black development. The capital problem is selective and should not be viewed as a panacea even if the concept of Black development has been defended satisfactorily. It is interesting to note the amount and sources of funds currently available or being sought for programs formally structured by Blacks with an economics focus.

Conservative organizations have sought funds from both the private and public sector and continue to do so. Funds for the National Business League's Project *Mainstream* illustrate the public-private cooperative emphasis. In the 12 regions where NBL's Small Investment Companies are being organized, funds are being sought from the White "majority business community." The NBL has solicited outright grants from large corporations and has offered a variety of equity and debt instruments for sale to any interested party. The Local and State Development Companies of the Project were created to utilize Section 502 of the Small Business Act, which provides financial support for plant and equipment for shopping centers and small industrial parks that employ the urban hard-core unemployed. Private funds are being sought to finance the data processing centers.

The pilot project for management training *Outreach* activated by the NBL is financed by the Department of Commerce, Economic Development Administration and the Office of Economic Opportunity. The franchise and other similar projects are funded by private and public sources with emphasis placed on local sources of funds.

The massive "modular core" program of NBL, which is really a broad gauged urban development program, must also look to the "majority White business community" and the federal government for funds for various components.

The individual and group counseling activities of the Small Business Development and Guidance Center have been provided by the EDA. The modest funding, about \$150,000 per year, has been used for actual operations. The constraint on the expansion of the SBDGC activities are currently physical facilities and staff. The SBDGC needs more space and more facilities than are currently available in the temporary buildings at Howard University.

The Urban League has been tapping both private sector, personal and corporate, funds as well as government resources. Its highly successful job placement and training programs have been funded by the Department of Labor. The Urban League's larger community development interest in housing, education, and health care requires extremely large

amounts of capital. As noted earlier in this review, Mr. Young has argued for "A Freedom Budget" before the Senate Sub-committee on Executive Reorganization (Committee on Government Operations).

III

A Freedom Budget

THE FREEDOM BUDGET was developed under the auspices of the A. Philip Randolph Institute with professional advice by Leon Keyserling and others. This program is of particular interest because it, like most of those noted in this paper, is a product of Black origin and is advocated by Blacks as consistent with their views on economic development. It is important because of the Black estimates of the magnitude of funds needed for an omnibus approach to the overall development. The Freedom Budget provides for seven basic objectives: 1. to provide full employment for all willing to work; 2. to assure decent and adequate wages to all who work; 3. to assure a decent standard of living to those who cannot or should not work; 4. to wipe out the slum ghettos and provide decent homes for all Americans; 5. to provide decent medical care and adequate educational opportunities for all at a cost they can afford; 6. to purify our air and water and develop our transportation and natural resources on a scale suitable to overall economic growth; and 7. to unite sustained full employment with sustained full production and high economic growth.

These goals must be implemented through national programs with the federal government exercising the leadership role. The Freedom Budget assumes that if the federal authorities exercise prudent monetary and fiscal policies that the national output should rise to between \$1,085 and \$1,120 billion by 1975. For the ten years used in the Freedom Budget, "a level of total national production averaging annually \$231.5-244.2 million higher, and aggregating over the ten years \$2.315-2.442 billion higher, than if total production remained during these ten years at the 1965 rate."¹⁶ This aggregate ten-year figure of \$2.3 to 2.4 billion is the "economic growth dividend" upon which the Freedom Budget draws to fulfill its purpose.

THE IMPLEMENTATION OF THE Freedom Budget would be outlined in a new section of the President's Economic Report. The allocation of the economic growth dividend would be for existing but expanded programs and for new programs not now included in the federal budget. For

¹⁶ A 'Freedom Budget' for All Americans (New York: A. Philip Randolph Institute, October, 1966), p. 5.

example, the funds for the Economic Opportunity Program should rise from \$1.4 billion in 1967 to 3.0 billion in 1970 and then to \$4.0 billion in 1975. Housing and community development programs should rise from \$0.1 billion to \$3.3 billion and then to \$3.8 billion; for agriculture and natural resources combined outlays should increase from \$5.9 billion to \$10.5 billion and then to \$12.0 billion; for education the increase should be from \$2.6 billion to \$7.0 billion to \$9.5 billion; health services should rise to \$7.0 billion in 1975; public assistance, labor and manpower, and other welfare services total budget expenditures should be at the \$7.5 billion mark in 1975.

Total federal budget outlays with the Freedom Budget allocation would not increase as a percentage of GNP over the ten-year period. Stated in different terms, at the time the Freedom Budget was developed, average GNP per capita was \$3,500. "We grant to the federal government a slice equal to roughly \$500 in the form of taxes, leaving us an average of about \$3,000 to spend on our other needs."¹⁷

If our nation's productivity continues growing at the same rate as in recent years—and it will if the Freedom Budget is adopted—each share will grow at about \$5,000. Thus the federal government's slice will grow to \$700, . . . and we will still have \$4,300 left for our other needs.

What the Freedom Budget proposes is this: Budget a fraction of this \$200 increase in federal tax revenues to provide jobs for all who can work and adequate income of other types for those who cannot.¹⁸

In commenting on the Freedom Budget, A. Philip Randolph points to the necessity for government channeled resources to eradicate poverty.

But the very nature of a total war against unemployment and poverty and all their manifestations calls for greatly increased emphasis upon adequate federal programs and huge increase in federal expenditures. Increases in private incomes alone, while necessary, cannot themselves at appreciable speed channel a large enough part of our resource into clearance of slums, the rebuilding of our cities, the construction of schools and hospitals, the recruitment and adequate pay of teachers and nurses.¹⁹

Mr. Randolph expects the federal government to serve as the catalyst in developing full employment and estimates that a financial commitment of at least \$185 billion is necessary. It is interesting to note that Mr. Randolph's budget would also directly alter the economic well-being of White Americans in similar poverty conditions.

¹⁷ *Federal Role in Urban Affairs*, Part 9, *op. cit.*, p. 1993.

¹⁸ A 'Freedom Budget' for All Americans, *A Summary* (New York: A. Philip Randolph Institute, New York, New York, January, 1967), p. 11.

¹⁹ A. Philip Randolph, "Toward a Freedom Budget," *Dissent*, 13 (March-April, 1966), p. 125.

IV

The Ghediplan

SOURCES OF GOVERNMENT FUNDS are the principal concern of another capital funding program suggested by Dr. Dunbar S. McLaurin. Dr. McLaurin's program, called the "Ghetto Economic Development and Industrialization Plan," was prepared for the Human Resources Administration of the City of New York. The *Ghediplan* has two basic components: (a) a source of funds for business in the ghettos and (b) a guaranteed market for the ghetto businesses once established.

Of the \$200 million potentially available under this plan, half would represent guaranteed financing for businesses and half would be in guaranteed markets for products and services of the businesses. The plan has elements of an approach to the restructure of New York slums similar to those found for developing nations on an international basis. In the particular plan proposed, the City of New York would provide the financing by depositing a portion of city funds in slum-area banks on the condition that the banks make development loans to ten newly found corporations created to funnel the monies into local businesses. Five of these corporations would be non-profit Local Development Corporations to attract new industry and to otherwise stimulate the ghetto community. The remaining corporations would be Small Business Investment Companies which would help convert the local government deposits into venture capital and loans.²⁰

The Ghetto Economic Development and Industrialization Plan would increase the productivity of the ghetto's private sector and employ the city's under-utilized fiscal and purchasing resources.

By encouraging guaranteed markets for the program from the resources of the city, the federal government and private business corporations would be formed within the ghettos in an effort to reclaim some of the ghetto income and put it to work there.²¹

Although no action has been taken by the City of New York to implement the development concept, Cyril Tyson, Commissioner of the City Manpower and Career Development Agency, has noted that

The use of government procurement to provide a guaranteed market for ghetto businessesmen to staff a business, or to expand and put a floor down is clearly a dynamic new way of thinking. We in New York City believe it can work nation-wide as well as locally.²²

²⁰ See article by Charles G. Bennett, "City Development Plan Seeks to Aid Slum-Area Businesses," *New York Times*, April 11, 1968.

²¹ "McLaurin Offers Plan to Aid Slum Sections," *Daily Argus*, Mount Vernon, N. Y., April 12, 1968.

²² "Asks Bldg., Business for Ghetto," *N. Y. Amsterdam News*, April 13, 1968.

The magnitude of the estimates of the capital resources necessary to revitalize the ghettos and to eradicate poverty throughout the nation should be noted. The Freedom Budget makes reference to \$185 billion over a ten-year period, the local *Gbediplan* project estimates the use of \$200 million for New York City alone, while the National Business League's initial and single modular core costs are set at \$75 million. A non-Black estimate of the capital cost of urban development was made for Goodbody and Company, a brokerage, investment banker and financial services organization, by economist Lawrence Ritter of New York University. Ritter estimates that the cost of a domestic "Marshall Plan" is "likely to range between \$150 billion and \$250 billion over a ten-year period, or about \$15 billion to \$25 billion annually at current prices."²³

Each of the programs noted are directed at total or fractional economic development of the black community and require the large outlays of money and resources. At issue in the potential success of this myriad system of programs is the adequacy of financing, the administration of the programs but more fundamentally the appropriate design of a scheme to alleviate the root causes of the poverty and discrimination problems.

V

Non-Black Programs

GOVERNMENT AGENCIES have also established a series of Black economic development programs. In almost all cases the programs have been guided by advice from segments of the Black community. Legislation affecting the Small Business Administration's lending and financing policies has been directed to meeting some of the financial constraints facing minority businesses. The SBA's new "Project Own" is designed to establish 10,000 new minority businesses by the end of fiscal 1969 and 20,000 by the end of fiscal 1970. This expansion of minority ownership will require investment at the rate of \$250 million by the end of the first year and \$500 million during the second year. The SBA's "Sec. 502" local development company program is another recent example of the legislative sponsorship of developmental financing for indigenous community groups.

The Department of Commerce through its "Affirmative Action Programs" has developed and implemented a variety of specific projects designed to aid disadvantaged minority businesses. These elements of the Economic Development Administration's activities include credit pools

²³ Lawrence S. Ritter, *A Capital Market Plan for the Urban Areas* (New York: Goodbody and Co., undated, p. 12.

and loan guarantees, the development of additional leadership in the Negro business community (Youth Enterprises, Inc.), franchise opportunities, aid to Negro construction companies in urban, and housing development projects.²⁴

Numerous other "developmental" programs affecting the ghetto communities are administered by the Department of Housing and Urban Development. An encyclopedic listing of these and other agency programs would only reinforce the idea that development thrust and large outlays are required for the private and public sector activities advocated by or for both the Black and White communities.

VI

The Issues—Summary and Evaluation

PROGRAMS ADVOCATED BY non-militant Blacks are designed to help the Negro "make it" within the existing economic framework. There are no suggestions for a separate Black State or other forms of economic segregation. All of these proposals are aimed at raising income, expanding business opportunities, and improving the economic well-being of the Negro.

Any evaluation of the economic development programs advocated must include social, financial, and conceptual issues, as well as an assessment of the emphasis and format of economic programs.

Three elements of concern are noted about the implications of the present thrust *vis à vis* the Negro economic programs and the direction of overall social policy in this country: 1. For the Negro, economic development is not an end in itself, but a technique to achieve other social and political priorities. The viability of economic development as a vehicle for obtaining these other non-material goals needs to be carefully evaluated. 2. If it can be argued that economic development is an appropriate device to obtain these ends, then it is necessary to evaluate the techniques that are being employed to augment development. 3. The drive for economic development is being undertaken to achieve social goals for the Negro. The consequences of the present orientation for overall social policy and priorities in the United States should be investigated.

Studies in the sociology and economics of development indicate that cultural and institutional changes are prerequisites for successful initiation of the development process in both the social and economic dimensions.

²⁴ See Projects No. 200-1, 300-1, 400-1, 500-1, published by the Business and Defense Services Administration, United States Department of Commerce.

One precondition for development is an emerging sense of cultural pride or identity, such as nationalism, which can overcome the traditional cultural constraints to high achievement and motivation in the populace. Viewed in this perspective, the current emphasis of the Negro movement for "Black Power" and "Black Pride" are coherent steps in establishing the preconditions for the social and economic development of the Negro. In the current focus on Black capitalism it is assumed that a direct relationship exists between the acquisition of control over economic means and the acquisition of social and political leverage. This is an unsubstantiated assumption. Economic development alone has not been the panacea by which other minority groups have achieved social and political power or gained admittance to the institutional structure of American society. Even if economic integration into American society is not the goal, the assumption that self-determination for the Black populace can be achieved through economic power is critical and should be reexamined. There are international examples of countries whose weight in world politics is disproportionate to their economic base. If this assumption of a relationship between economic wealth and political power is valid within the United States, the economic focus of the Negro movement can be interpreted as a pragmatic adjustment to the reality of a serious defect in American democracy.

There is also a serious issue arising from the differences in the business forms and their relationship to power. The simplest form of Black businesses which could be successfully established would be small retail or service proprietorships. However, the economic power derived from this type of activity cannot be great unless it represents an overall increase in individual economic welfare with an aggregate increase in economic power. The presence of Black retail firms in ghetto areas would challenge the contention that White retail firms in these areas causes all surplus and investible funds to flow out of the ghetto, excluding them from use in local economic development. This is an unexamined premise. The share of these funds retained in the ghetto may or may not be greater if these firms were Black owned and operated. Only comparative analysis of actual cases would substantiate this. It is quite probable that the increase in the share of funds retained within the ghetto would be only the owner's profit (in the area of a 2 to 4 per cent increase). These Black owners must be willing to spend and invest within the Black community. The remainder of the income of these firms would flow out for inventory purchases, advertising expenditures, taxes, labor costs, etc. Only the wage payments would remain in the ghetto. This usually occurs

whether the firm is White- or Black-owned (assuming that White businessmen hire Negro employees).

The alternate course of action would be to concentrate on Black ownership of industrial firms. The size of these undertakings and the associated economic power would be significant. The capitalization for industrial activities of this size is usually obtained by the dispersal of ownership through sale of shares of stock. There has been a tendency, particularly in the post-war period, for ownership to be separated from effective control. The actual economic power represented by ownership may not be very significant. Thus two interesting alternative possibilities for action are implied.

A more effective way for the Negro to obtain economic power might be through the development of management and executive personnel to infiltrate the practical sources of economic power in the industrial establishment and the government. The economic costs to the Negro community of achieving economic power through the management route would be significantly lower than through attempting to establish new industrial concerns, and the risks involved are fewer. The contemporary evolution of the American industry structure is characterized by the horizontal expansion of established industries into new enterprises, rather than by the successful creation of new industries. Negroes have not traditionally chosen education or professional careers in management, due in part to the inaccessibility of both management training and job opportunities. The constraints upon Negro participation in this occupational field seem to be eroding in the contemporary social and business environment.

Another possibility suggested by the difficulties of obtaining economic power through the creation of Black-owned large-scale industrial enterprises is the creation of smaller industrial firms using the cooperative form of organization. In cooperatives ownership and control are more closely aligned because of the communal nature of the decision-making processes. Cooperative activities on a significant scale have proved successful in many activities such as banking, milling, real estate, factories, and mills. The possibilities for cooperatives have been noted in the Negro community. ONE NEGRO WITH MANY.

Now after years and years of procrastination, we need to become attuned to the cooperative business line which has already brought security and protection to millions of White families around the world. We need to face up to the current economic revolution initiated by the development of automation and unite in cooperative action to insure us a solid

foundation to build and live the good life.²⁵

The assumption of correspondence between acquisition of economic power and political and social leverage is critical. If this relationship can be verified, then the successful development of economic power is essential to the aspirations of both militants and non-militants. It is imperative that the modes of economic development undertaken have the greatest possibility for success. It is important that the assumptions under which economic development is undertaken be verified and the means chosen be effective.

Kain and Persky of Harvard have made several careful studies of the programs designed to attack the sources of economic deprivation of the Negro. Their comments are illuminating and potentially helpful:

Despite the urgency of the current situation, alternative policies must be evaluated in terms of their long run impact. The selection of specific program tools should be governed by a careful definition of the underlying problems. Few existing programs have such a legitimate birth.²⁶ . . .

The Negro in this country clearly faces a broad range of pressing problems, problems that challenge the basic structure of our social and physical environment. While there are many proposals and counterproposals aimed at the ultimate solution, it is clear now that no easy way out exists.²⁷

Denison University
Granville, Ohio 43023

²⁵ Theora Makeda, "A Challenge for Black Leadership," *Liberator*, Vol. 7 (June, 1967), p. 11.

²⁶ John F. Kain and Joseph J. Persky, *Alternatives to the Gilded Ghetto*, Program of Regional and Urban Economics, Discussion Paper No. 21, Harvard University, February, 1968, p. 1.

²⁷ *Ibid.*, pp. 31-32.

Needed: An Ethical Code for Behavioral Scientists

IN FUTURE CENTURIES, historians may regard the Twentieth Century as one of, perhaps even *the* most important period in the long evolutionary progression of mankind. If so, attention almost surely will be focussed on two developments of great significance.

The first is achievement, for the first time, of an adequate description of useful methods of inquiry into the problems of men in society. These ~~methods~~ ^{methods} have been the subject of the study of inquiry and include provision for self correction and revision as inquiry proceeds. Earlier methods of inquiry into men's problems have ranged from the efforts of primitive medicine men or witch doctors, oracles and soothsayers, giving forth both

religious and secular revelations, to the more sophisticated quest for certainty undertaken by philosophers for some 2,000 years. All of these earlier methods lacked the self-correcting feature that characterizes the new method. Availability of the new method justifies hope that those who understand and apply it will find increasingly useful solutions for the problems of men in society.

The second development is recognition by leading physical and physiological scientists that the most able professional inquirers in the behavioral or social studies are entitled to be classified as "scientists." Many of the latter have been endeavoring for years to have their fields of inquiry recognized as sciences by the National Science Foundation, the nation's most distinguished scientific body, which has served the United States for more than a century. At last they have succeeded.

Thus the behavioral or social sciences in a sense have reached maturity at a time when the opportunities for great advances by application of the new method seem most promising. Nevertheless, we believe that corresponding in magnitude with the opportunities are serious potential dangers for the future of mankind. If the behavioral scientists derive their principal support from governments or from entrenched vested interests, too many scientists may become the conscious or unconscious tools of those who seek power over their fellow men. How best can the behavioral scientists insure for themselves the dedication to useful inquiry that will justify public confidence in their efforts comparable with the confidence in those practitioners of medicine whose conduct is guided by the Hippocratic Oath?

An article scheduled for an early issue is concerned with this subject.¹ We hope that it will be the first of many in our own and other leading journals until the overwhelming majority of behavioral scientists have reached a consensus on a professional code of ethics. When that time comes, hopefully in the present century, mankind will have some reason to expect that the future may be somewhat better than a repetition of the past.

EDITOR

¹E. C. Harwood and Kollo Handy, "Would Government Support Be a 'Risky Trap' for Behavioral Scientists? (A Discussion of the Problem of the Social Sciences)"

Education for Improving Society

UNICEF HELPS CHILDREN in 112 developing nations. To improve their lives it provides equipment to schools and training grants to teachers. More schools and teachers are urgently needed.

The Industrialization of the Southeast Since 1950:

Some Causes of Manufacturing Relocation, With Speculation About Its Effects

By WILLIAM R. SCHRIVER

ABSTRACT. Although wide recognition has been given to the recent industrialization of the Southeast, little attention has been directed toward specific causes and the societal effects of this economic change. A concentration in manufacturing has occurred frequently in low-wage, low-growth industries as a result of labor surpluses and certain external economies in the region and also as a result of deglomerative forces acting in the older established manufacturing areas. It would appear that these compositional changes in the region's economy would lead to societal changes in an urbanistic direction.

THE FACT OF INDUSTRIALIZATION in the South has been widely recognized and described in numerous academic and governmental publications and public news media. Dependence upon the traditional employment in agriculture, mining and forestry has largely been declining since the beginning of the past decade, accompanied by tremendous employment gains in manufacturing, trade and services.

Although these compositional changes have apparently received great attention, little attention has been focused upon the extant conditions in and out of the South that substantially explain the secular phenomenon of transition to this higher stage of economic performance. This article will address itself to this seemingly neglected aspect of Southern development by: (1) describing the extent and direction of industrialization in the Southeast¹; (2) briefly tracing and summarizing the current theoretical position of changes in the location of economic activity, hypothesizing the saliency of certain aspects to recent Southeastern trends; (3) interpreting Southeastern industrialization within the developed theoretical framework by analyzing some recently collected data relevant to the locational choice of new manufacturing establishments in a South-

¹ For the purpose of this paper the Southeast Region consists of Alabama, Kentucky, Mississippi and Tennessee (coinciding with the U. S. Census definition of the East South Central Region).

eastern state; and finally, (4) briefly commenting upon the social effects of industrialization.

I

Recent Industrialization in the Southeast

IN DESCRIBING THE STRUCTURE of any regional economy it is convenient to choose relevant variables that may be interpreted with a minimum of ambiguity and, in addition, lend themselves to meaningful comparisons with other regional economies. The following variables are employed in the description of change in the Southeast Region without further justification: (a) population; (b) personal income; (c) employment by economic sector; and (d) a specialization index (Adjusted Location Quotient)² that reflects the relative degree of specialization of a region in a specific type of manufacturing activity in comparison to the nation, thus identifying the economic base of the region.

Table 1

POPULATION CHANGES, 1950-66, IN THE SOUTHEAST STATES

	1950		1960		Population		
	Population (1000)	% Urban	Population (1000)	% Urban	1966 ^a Population (1000)	Per Cent 1950-1966 Change	Urban 1950-1960 % Change
U.S.A.	151,326	64.0	179,323	69.9	195,857	29.4%	5.9
Southeast	11,477	39.1	12,050	48.4	12,910	12.4%	9.3
Ala.	3,062	43.8	3,267	55.0	3,517	14.8%	11.2
Ky.	2,945	36.8	3,038	44.5	3,183	8.0%	7.7
Miss.	2,179	27.9	2,178	37.7	2,327	6.7%	9.8
Tenn.	3,292	44.1	3,567	52.3	3,883	17.9%	8.2

^a July 1, 1966 estimates by the Bureau of the Census.

SOURCE: Statistical Abstract of the United States, 1967, Bureau of the Census, United States Department of Commerce.

Prior to an examination of the basic changes in employment and their consequences, it is necessary to keep in mind that these changes occurred in a region of extremely low population growth. Although the Southeast has been primarily rural with a concomitant high rate of natural increase in population, net out-migration of Olympian proportions, particularly among Negroes, has caused to offset real population gains, re-

² The Adjusted Location Quotient relates the proportion of total employment in a given industry in a specific state to the same proportion in the United States as a whole and is adjusted for state differences in value-added through manufacture. Its computation is explained in Table 5. See: Ronald E. Carrier, Karen S. Johnson and William R. Schriver, *Tennessee Industrial Economy*, (Memphis, Tennessee: Memphis State Bureau of Business and Economic Research, Memphis State University, 1966).

straining the region's growth to one of the lowest rates of any group of contiguous states in the nation.

Table 1 traces the population growth of the United States, the Southeast and its component states between 1950 and 1966. It can be seen that the region grew at a rate less than half that of the nation with only Tennessee and Alabama showing a substantial increase. The region and each component state showed a gain in per cent urban population exceeding that of the nation during the interval 1950-1960. Although slow population growth may frequently impede economic growth, net out-migration in the Southeast has had a positive effect on measures of economic growth in that region by: (a) obviating the many social costs associated with the maintenance of a large segment of economically non-productive, unskilled persons (primarily the rural-born Negro), and transferring the social costs to the nation while freeing local capital as direct and indirect agents of economic growth; and (b) raising per capita income by dividing total personal income among less recipients.

Table 2 shows the changes in total personal and per capita income in the United States and the Southeast States for the years 1950-1967. Although per capita income in the region remains even today substantially less than the national average, ranging from 60.4 per cent in Mississippi to 76 per cent in Kentucky, per capita income increases in the region have been proportionately greater than the national average since 1950. While the national average has increased by 111.2 per cent since 1950, even the component state reflecting the lowest rate of per capita income growth, Tennessee, exceeded the national per cent increase by 27.6 per cent, and Alabama, the leader in per capita income growth, exceeded the national average by 37.7 per cent.

Although per capita income gains in the Southeast have been primarily an effect of additional income generation in the manufacturing sector, as will be discussed subsequently, the effects of constant emigration of non-participants in the economy remain indelible. The emigration of large numbers of farm laborers was also accompanied by a large rural-to-urban population shift within the region, both being at least partially caused by cataclysmic changes in the agricultural production function, resulting in structural unemployment. Reductions in agricultural employment relatively and absolutely, the increasing size and decreasing number of farms, increasing mechanization and more efficient production methods have been associated with general increases in the value of agricultural production.

Table 2

INCOME IN THE SOUTHEAST STATES

Total Personal and Per Capita Income, 1950, 1960 and 1967,
United States and Southeast States

Area	1950 ^a			1960			1967		
	Total (Millions)	Per Capita	Per Cent of National Average	Total (Millions)	Per Capita	Per Cent of National Average	Total (Millions)	Per Capita	Per Cent of National Average
United States	226,481	1,485	100.0%	399,028	2,566	100.0%	620,568		
Alabama	2,659	370	58.6%	4,789	1,749	68.2%	7,668		
Kentucky	2,834	965	65.0%	4,672	1,830	71.3%	7,612		
Mississippi	1,590	731	49.2%	2,552	1,438	56.0%	4,449		
Tennessee	3,288	992	66.8%	5,494	1,859	69.2%	9,222		

^a Does not include Alaska and Hawaii which are in 1960 and 1967 totals.

SOURCE: Survey of Current Business 1965 and Survey of Current Business, Preliminary Report, 1968, United States of Business Economics.

Table 3 traces the inchoate movements of agricultural employment between 1950 and 1960 and shows that all four component states had decreases in agricultural employment at a rate at least twice that of the nation with Mississippi decreasing at a rate almost fourfold that of the nation. However, the location quotients reveal that a residual concentration of agricultural employment remains in the region, and although this concentration may continue to lessen as it is doing at present,³ it may not reach unity due to regional comparative advantages and inertial strains in agriculture.

Table 3
SOUTHEASTERN AGRICULTURAL EMPLOYMENT, 1950-60
Per Cent Changes in Agricultural Employment, 1950-1960
United States and Southeast States^a

Area	Per Cent of Total Employment		Per Cent Change	Location Quotient ^b	
	1950	1960		1950	1960
United States	12.4	6.7	- 5.7	—	—
Southeast					
Alabama	24.5	9.8	- 14.7	1.98	1.46
Kentucky	25.7	14.2	- 11.5	2.07	2.12
Mississippi	42.4	21.4	- 21.0	3.42	3.19
Tennessee	21.9	10.8	- 11.1	1.77	1.61

^a Includes employment in forestry and fisheries.

^b Location Quotient is the per cent of total state employment employed in agriculture divided by the per cent of total national employment employed in agriculture. The excess of the proportion over unity is the extent of employment specialization above the national average.

SOURCE: Census of Population: 1950 and 1960 (U.S. Bureau of the Census).

Quite opposite forces in concurrent operation primarily in the heavily industrialized states to the North and Northeast served to create a "push-pull" relationship in changing the employment composition of the Southeast Region even further. Increasing aggregate demand in the nation for most manufacturing production that tended to be concentrated in the northern manufacturing belt led to secondary demand increases for labor and other productive factors, competitively increasing production costs. Although this point will be discussed in greater detail in a later section of this paper, suffice to say here that these forces leading to higher production costs in the established manufacturing areas began "pushing" certain manufacturing activities outward, while the attractive lower pro-

³ E. Walton Jones, "Farm Labor and Public Policy," *Monthly Labor Review*, Vol. 91 (March, 1968), pp. 12-15.

duction costs in the Southeast Region, as a consequence of a tremendous labor surplus and public policies that generally favored industrialization (anti-union legislation, "municipal industrial bond" financing, tax con-

Table 4

SOUTHEASTERN INDUSTRIAL EMPLOYMENT 1947-66

Employment Structure, 1966, and Per Cent Changes in Non-Agricultural Employment by Industrial Sector, 1947-1966, United States and Southeast States

Area	Total Non-Agricultural Employment	Mining	Contract Construction	Manufacturing	Transportation and Public Utilities	Trade	Finance, Real Estate, Insurance	Services	Government
United States									
per cent change ^a	45.5	-34.2	65.5	22.7	-0.7	47.6	75.9	89.7	98.2
1966 employment structure ^b	100.0	1.0	5.1	29.9	6.5	20.7	4.8	15.0	17.0
Alabama									
per cent change	52.2	-74.8	129.6	30.5	-9.5	63.5	133.5	99.2	110.8
1966 employment structure	100.0	0.9	5.9	31.5	5.5	18.6	4.0	13.2	20.3
Kentucky									
per cent change	51.0	-55.6	134.4	59.2	-9.0	67.1	123.2	84.2	96.6
1966 employment structure	100.0	3.7	6.3	27.6	6.9	20.2	3.9	13.1	18.3
Mississippi									
per cent change	78.3	35.7	109.4	80.4	11.1	65.0	175.0	98.0	90.3
1966 employment structure	100.0	1.1	6.0	31.9	5.2	18.8	3.4	11.6	22.0
Tennessee									
per cent change	65.8	-47.8	62.4	66.8	-1.2	59.5	88.2	81.2	114.4
1966 employment structure	100.0	0.6	5.4	35.9	5.0	19.5	4.0	12.9	16.7

^a Percentage change in Industrial Sector employment between 1947 and 1966 by area.

^b Industrial Sector as a per cent of total non-agricultural employment in 1966 by area.

Source: *Employment and Population Statistics for States and Areas, 1949-1966*. Computations by W. J. Gubel, "Employment and Economic Growth, *Southwest, Midwest, and West*, *Labor Review*, Vol. 91, No. 3 (March, 1968).

cessions, etc.) began to "pull" new manufacturing payrolls southward, releasing a concatenation of events that has led to a new economic structure.

As agricultural employment decreased in the Southeast Region, large

gains were made in non-agricultural employment. Table 4 shows that each component state gained at a rate higher than that of the nation in total non-agricultural employment. Although Table 4 shows many interesting comparisons, the most important shift occurred in manufacturing. Manufacturing in the region is presently the sector of highest employment and absolute employment gains during the interval 1947-1966 and is tentatively identified as the *economic base*, in terms of basic income generation and interregional linkages, while the other non-agricultural sectors may be viewed as *service activities* in that they have primarily intraregional linkages and are a consequence of the demand and consumption functions of the *economic base*, i.e. manufacturing.⁴ The assumption is that gains in manufacturing have and will, at least in the near future, generally lead to gains in the *service sectors* such as trade, construction, finance, real estate and insurance, and services and not *vice versa*.

Although manufacturing has dominated the recent economic scene in the Southeast, Table 4 does not reveal the specific types of manufacturing dominance, which in themselves are partial determinants of regional growth in employment and personal income due to variations in national growth rates and worker earnings among different types of manufacturing. Table 5 reveals the dominance of specific manufacturing groups with regard to employment concentration adjusted to national productivity levels (average value-added per production worker). The Adjusted Location Quotients (computation shown in Table 4) may be interpreted as revealing the selective magnitude of a specific manufacturing group as an *economic base*, although in fact one or more manufacturing groups may be integrated in a manufacturing process that links only the final industry interregionally. When a state Quotient exceeds unity in an industry, that state is producing more than its "national share" in that industry.

Table 5 reveals that while no component state had a Quotient for all manufacturing in excess of unity, each component state was highly specialized in several industries. A perusal of Table 6, derived from Table 5, reveals that the modal pattern of manufacturing concentration in 1963, as measured by excess of unity in Adjusted Location Quotients, was in the category of low-wage, low-growth industries. Concentration tended to decrease in the high-wage categories and the high-growth categories. This finding corroborates a previous statement concerning savings in labor costs as a prime locational factor in the region, and, as the reader will

⁴ For a more complete explanation see: Walter Isard, *Methods of Regional Analysis: An Introduction to Regional Science* (Cambridge, Mass.: The M.I.T. Press, 1960), pp. 182-93.

Table 5
FACTORY LOCATION IN THE SOUTHEAST STATES
Adjusted Location Quotients* for Manufacturing Industries and Their Rank
in Growth and Hourly Earnings, 1954-1963, Southeast States^b

	Rank of National Average Earnings ^c	Rank of National Growth ^d	Tennessee		Alabama		Kentucky		Mississippi	
			Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient
			1954	1963	1954	1963	1954	1963	1954	1963
All manufacturing	—	—	.73	.90	.74	.82	.69	.86	.33	.52
Food and Kindred Products	Medium	Low (-)	.71	.86	.46	.61	1.46	1.14	.37	.37
Tobacco Manufacturers	Low	Low (-)	n.a. ^e	.49	n.a.	n.a.	11.22	11.04	n.a.	n.a.
Textile Mill Products	Low	Low (-)	1.50	1.54	2.27	2.45	.23	.39	.28	.65
Apparel and Related Products	Low	Medium	.79	1.81	.81	1.32	.72	.79	.88	1.60
Lumber and Wood Products	Low	Low (-)	1.14	1.14	1.77	1.70	.64	.73	1.85	3.27
Furniture and Fixtures	Low	Medium	1.12	1.83	.27	.53	.79	.77	.54	1.54
Paper and Allied Products	Medium	Medium	.71	1.03	1.10	1.50	.10	.27	1.55	.74
Printing and Publishing	High	Medium	.54	.62	.37	.35	.49	.50	.15	.16
Chemicals and Allied Products	High	High	2.54	2.40	.57	.89	1.01	1.05	.44	.57
Petroleum and Coal Products	High	Low (-)	.09	.11 ^f	1.69	.29	.48	.60	.08	n.a.
Rubber and Plastics Products	Medium	High	1.42	.90	2.20	1.63	n.a.	.12	n.a.	n.a.
Leather and Leather Products	Low	Low (-)	1.68	2.68	n.a.	n.a.	.53	.59	n.a.	n.a.
Stone, Clay, and Glass Products	Medium	Medium	.64	1.28	1.00	.92	.54	.66	.42	.73
Primary Metal Industries	High	Low	.50	.58	2.18	2.29	.44	.59	.01	.05
Fabricated Metal Products	Medium	Medium	.68	.63	.58	.76	.81	.82	.13	.44

Table 5 (Continued)

	Rank of National Average Earnings ^c	Rank of National Growth ^d	Tennessee		Alabama		Kentucky		Mississippi	
			Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient	Adjusted Location Quotient		
			1954	1963	1954	1963	1954	1963	1954	1963
Machinery, Except Electrical	High	High	.24	.33	.18	.21	.64	.89	.08	.24
Electrical Machinery	Medium	High	.22	.70	.16	.15	.49	1.40	.10	.28
Transportation Equipment	High	High	.19	.23	.26	.42	.14	.60	.20	.26
Instruments and Related Products	Medium	High	.33	.32	n.a.	n.a.	.15	n.a.	n.a.	n.a.
Miscellaneous Manufacturing	Low	Medium	n.a.	.41	.19	.66	n.a.	.16	.06	.39
* Adjusted Location Quotient =										
Employment in Industry A in State Economy X										
Total Employment in State Economy X			multiplied by							
Employment in Industry A in United States										
Total Employment in United States			Value Added per Worker, Industry A, Economy X							
			Value Added per Worker, Industry A, United States							

^b Adjusted Location Quotient for the United States = Unity^c Rank of average national hourly earnings of non-supervisory personnel, 1966: High = the six industries ranking highest; Medium = the seven middle industries; and Low = the seven lowest industries.^d Rank of rate of national employment growth, 1950-1966. High = the six industries ranking highest; Medium = the seven middle industries; and Low = the seven lowest industries, including those that decreased (-) in employment.^e Not available due to disclosure of firm identity since the industry is small in that state.^f Estimate by Memphis State Bureau of Business and Economic Research, Memphis State University

Sources: Census of Manufactures, 1954

Agricultural Statistics, 1961

Census of Manufactures, 1963

Agricultural Statistics, 1963

Employment and Earnings Statistics for States and Areas, 1939-1964 and 1909-1967.

later see, concurs with a subsequently discussed theoretical and empirical explanation of the attraction of the region to new manufacturing. The fact that the region shows gains in many low-growth and medium-growth industries is in part a reflection of locational shifts in manufacturing rather than real growth at the national level, *i.e.* regional growth has been primarily a consequence of localized concentration rather than diffuse national growth.

This is not to say that the region does not have concentration in some high-wage and/or high-growth industries, *e.g.* non-electrical machinery, rubber and plastic products, and chemicals and allied products. Their concentration, and a few others, must be explained in terms of other forces such as proximity to natural resources and industrial markets.

If a location quotient unadjusted for state difference for value-added per production worker had been used in the preceding presentation, it would have shown overall higher concentrations in manufacturing, measuring employment concentration only. Value-added per production worker is generally lower in the region, since labor has been traditionally cheap relative to capital, dictating a production function with high labor inputs relative to machinery and equipment inputs to obtain cost minimization for a given level of output. Notable exceptions to this regional trend have occurred among certain firms in the paper, synthetic fiber, chemical, glass and shoe industries where heavy capital inputs relative to labor have led to ratios exceeding national averages in their respective industries.

In summary, it has been shown that despite slow population growth in the Southeast Region⁵, the region is moving from traditional employment in agriculture to manufacturing employment at a pace faster than the national average. Employment gains often in excess of national averages have also been revealed in trade, construction, finance, real estate, insurance and services. Also rapid changes are occurring in occupational structure and female participation in the labor force. The semi-skilled and skilled occupations are growing at the expense of the farm and unskilled occupations. Although only briefly touched upon here, the economic metamorphosis presently taking place may wrest incalculable social change upon other institutions, all with many indigenous characteristics.⁶

⁵ U. S. Census of Population, 1960.

⁶ For a more complete treatment of social and economic trends in the South, see: James G. Maddox *et al.*, *The Advancing South: Manpower Prospects and Problems* (New York: Twentieth Century Fund, Inc., 1967); and F. Ray Marshall, *Labor in the South* (Cambridge, Mass.: Harvard University Press, 1967).

II

Location Theory: Its Development and Efficacy to Southeastern Growth

PLANT LOCATION THEORY had its origin in the writings of von Thünen,⁷ although his ideas were not entirely independent of earlier writers.⁸ Using the method of least-cost analysis, von Thünen attempted to explain with his imaginary isolated state, surrounded by an homogenous hinterland, the prices and location of agricultural production. His cost-analysis centered on soil variations and distance from the buying center as co-determinants of marginal cultivation zones being set at points of marginal profitability. Later, and more importantly, Weber⁹ developed a location system primarily with regard to manufacturing that forms the basis of much current theory. Along the same lines of partial-equilibrium analysis (attention only to cost minimization without regard to revenue maximization), Weber attempted to establish principles of manufacturing location based primarily upon transfer costs of raw materials and products. In explaining the attraction of manufacturing to a site at the source of raw materials or a market center site, Weber classified raw materials and manufacturing processes according to certain transfer cost features. Notable among those were: (1) ubiquities—materials present at most locations at an identical price; (2) localized materials—those found only at specified locations; (3) pure materials—localized materials which add their full weight to the finished product; and (4) gross materials—localized materials which add none or only a portion of their weight to the finished product, *e.g.* fuel.¹⁰

Weber generalized that plants using primarily ubiquitous materials would be pulled toward a market location; weight-losing processes would draw plants toward the sources of raw materials; weight-gaining processes would draw plants toward a market location; and, certain "agglomerative forces" tended to concentrate similar, dissimilar and linked plants at a single location due to increased external economies, *e.g.* trained labor, transportation facilities, etc.

⁷ Michael Chisholm, "Johann Heinrich von Thünen," in *Readings in Economic Geography* by Robert H. T. Smith, Edward J. Taaffe and Leslie J. King (eds.) (Chicago: Rand McNally and Company, 1968).

⁸ Von Thünen's theory of the location of agricultural production is a departure from Ricardo's theory of land-rent. See: J. F. Bell, *A History of Economic Thought* (New York: The Macmillan Company, 1951), pp. 100-101.

⁹ U. F. Friedrich, *Alfred Weber's Theory of the Location of Industries* (Chicago: University of Chicago Press, 1928).

¹⁰ Stuart Daggett, "The System of Alfred Weber" in *Readings in Economic Geography*, *op. cit.*

Table 6
SPECIALIZATION AND EARNINGS IN THE SOUTHEAST STATE
Frequency of Specialization in 1963 by Rank in National Average Earnings
and National Growth, Southeast States

Adjusted Location Quotient	Low- Low ^a	Medium- Low	Rank in Average Earnings-Growth			
			Low- Medium	Low- High	Medium High-	Medium Medium
Unity or More	7 (44) ^b	1 (25)	5 (42)	0	1 (12)	3 (25)
Less than Unity	5 (36)	3 (75)	7 (58)	0	7 (88)	9 (75)
Total	12 (80)	4 (100)	12 (100)	0	8 (100)	12 (100)

^a Average earnings and growth, in that order.

^b Percentages are shown in parentheses.

With the foundations of location theory established, later writers have added much to clarify the original principles and have extended location theory to the consideration of a host of other variables and situations that more nearly represent the real world. For example, Losch,¹¹ North¹² and Isard¹³ have contributed to the understanding of the spatial patterning of market locations, while Greenhut¹⁴ and others¹⁵ have theoretically and empirically examined locational interdependence and personal or economically non-rational factors associated with plant locations.

The location of manufacturing activity may be approached from two points of view; micro-economically from the view point of the firm and macro-economically in an *ex post facto* fashion. The approach of this paper will be to pursue an understanding of economic location decisions micro-economically and later examining locational patterns macro-economically. The author and a colleague,¹⁶ from ideas gained essentially from Greenhut¹⁷ and Hoover,¹⁸ have developed an empirical location model that will be briefly summarized and then used to explain recent manufacturing developments in the Southeast Region by analyzing some location data collected in Tennessee.

In utilizing the general-equilibrium approach to plant locations both cost minimization and revenue maximization must be considered since profit maximization (the greatest margin between total cost and total revenue) is the prime explanatory variable under the assumed aggregate conditions of economic rationality. The location factors (the economic factors upon which the firm bases its location decision) may be classified into four categories—the first three being categories of cost factors and the

¹¹ August Lösch, *The Economics of Location*, trans. by W. H. Woglom (New Haven: Yale University Press, 1954).

¹² J. Friedmann and William Alonso (eds.), *Regional Development and Planning: A Reader* (Cambridge: The M.I.T. Press, 1964).

¹³ Walter Isard, *Location and Space Economy* (Chicago: Scott Foresman and Company, 1963).

¹⁴ Melvin L. Greenhut, *Microeconomics and the Space Economy* (Chicago: Scott Foresman and Company, 1963).

¹⁵ For example see: Ronald E. Carrier and William R. Schriyer, "Location Theory: An Empirical Model and Selected Findings," *Land Economics*, August, 1968; Frank A. Fetter, "The Economic Law of Market Areas," *Quarterly Journal of Economics*, Vol. 38, (1929); and A. P. Lerner and H. W. Singer, "Some Notes on Duopoly and Spatial Competition," *Journal of Political Economy*, Vol. 45, (1937).

¹⁶ Ronald E. Carrier and William R. Schriyer, *op. cit.*

¹⁷ Melvin L. Greenhut, *Plant Locations in Theory and in Practice* (Chapel Hill: The University of North Carolina Press, 1956).

¹⁸ Edgar M. Hoover, *The Location of Economic Activity* (New York: McGraw Hill, 1948).

Location Factor ^a	Number of Firms ^b Indicating Factor Was Important	Per Cent	Rank	Distribution of: to the Locat		
				1-20	21-40	41-6
Category 1: Procurement Costs						
1. Better service from carrier of raw materials or components	22	7.1	15	16	5	1
2. Low cost on raw materials or components	41	13.2	13	31	8	2
3. Availability of low cost raw materials	28	9.0	14	10	10	7
Category 2: Processing Costs						
4. Low cost and availability of labor	202	65.3	1	67	56	57
5. Low cost of fuel	20	6.4	20	19	1	0
6. Low cost of electricity power	111	35.9	2	101	7	3
7. Low cost of financing project through Area Redevelopment Administration	5	1.6	20T	2	1	2
8. Climate	5	1.6	20T	5	0	0
9. Favorable labor-management relations	110	35.5	3	82	25	3
10. Low cost of satisfactory type of water	12	3.8	17	9	3	0
11. Adequate waste disposal	7	2.2	19	6	1	0
12. Low cost of building and land	61	19.7	4	57	2	2
13. Low cost of financing plant through revenue or general obligation bonds	52	16.8	9	35	14	3
14. Favorable community and state tax structure	54	17.4	6T	54	0	0
15. Community concessions	43	13.9	11T	24	16	2
16. Available existing plant	54	17.4	6T	26	7	13
17. Available existing building	51	16.5	8	29	11	6
18. Particular characteristics of building site	9	2.9	18	7	2	0
Category 3: Distribution Costs						
19. Low freight cost, finished product	55	17.7	5	39	9	5
Category 4: Location Demand						
20. Greater demand in area	44	14.2	10	18	15	6
21. Greater demand potential in area	43	13.9	11T	19	15	4

Table 7, continued

^a The list presented here excludes sixteen other location factors named by manufacturers that were classified as certainty and personal factors. (See R. E. Carrier and W. R. Schriver, *Land Economics*, op. cit.)

^b Numbers are not mutually exclusive, since the same firm could identify as many as six different factors.

Table 8

SUPPLIES AND MARKETS FOR TENNESSEE PLANTS

Market Locations and Sources of Raw Materials for Recently Located
Tennessee Manufacturing Establishments^{a, b}

Markets	Raw Materials			
	Local	Local Regional	Non-Local Regional	Total
Local	2 (.7) ^c	15 (4.9)	9 (3.0)	26 (8.6)
Local Regional	2 (.7)	7 (2.3)	20 (6.6)	29 (9.6)
Non-Local Regional	6 (2.0)	65 (21.3)	84 (27.5)	155 (50.8)
Nationwide	6 (2.0)	35 (11.5)	54 (17.7)	95 (31.2)
Total	16 (5.4)	122 (40.0)	167 (54.8)	305 (100.2)

^a Classifications are based upon frequency and volume of shipments—not value.

^b Excludes two ordnance firms, since data were not available for security reasons.

^c Percentages are shown in parentheses.

fourth containing revenue factors. Category 1. *Procurement Cost Factors* contain the costs of purchase and procurement of raw materials and components and their in-bound transfer to the plant. Category 2. *Processing Cost Factors* contain all those factors associated with the direct and indirect costs of processing the raw materials and components into the final product, including direct production costs, both fixed and variable, such as land, labor and capital, and indirect production costs such as community labor-management relations and other external production costs as they directly and indirectly affect production costs, including climate, energy, and supporting services. Category 3. *Distribution Cost Factors* contain those factors associated with the cost (to either buyer or seller) of transferring the product from the plant to the buyer. Category 4. *Location Demand Factors* contain those factors associated with locational interdependence and location demand (shift in the demand curve rather than movement along the curve), resulting in revenue changes due to imputed value of local products, closer relations between buyers and sellers, and assurance of scheduled delivery.

It is postulated that these categories of cost and revenue factors will exert varying degrees of influence upon the firm changing locations or

expanding in a branch plant, and the influence of each category will be selective according to the cost and revenue structures of the firm and industry. Category 1 will pull toward a site at the sources of raw materials; Category 2 will exert a pull independent of both raw material sources and markets toward areas of minimum processing costs, resulting in "footloose" industry and both Category 3 and 4 will exert a pull toward markets.

Manufactures characterized by one or more of the following conditions will tend to have a location orientation toward sources of raw materials: (a) procurement of relatively large volumes of localized, gross materials, low in unit value; (b) perishable raw material but non-perishable final product; (c) weight-losing processes; (d) industries low in value-added through manufactures;¹⁹ and (e) raw materials procured under complex arrangements.

Manufactures characterized by one or more of the following conditions will tend to have an orientation relatively independent of sources of raw materials and markets in seeking a minimum processing cost site: (a) ubiquitous raw materials with high unit-value, compact product; (b) one or more processing costs such as labor or energy, that override procurement or distribution costs; and (c) little or no variance in location demand.

Manufactures characterized by one or more of the following conditions will tend to have a location orientation toward markets: (a) weight-gaining process (particularly with regard to the addition of ubiquitous materials); (b) perishable, low-value or bulky final products; (c) dependence upon additional revenue from increased location demand at market locations.

In the real world additional forces exert their influence upon location patterns. Such conditions as personal considerations of the decision-maker, changing technology, historical development, transportation anomalies and the anticipation of future conditions may distort the pattern in any single time interval.²⁰ Nevertheless, this model should be sufficiently

¹⁹ Allan Pred, "The Concentration of High-Value-Added Manufacturing," in *Readings in Economic Geography*, op. cit.

²⁰ IN THE STUDY IN WHICH THE SUBSEQUENTLY DISCUSSED THREE BASIC CATEGORIES OF manufacturing of personal factors (economically non-rational factors) and certainty factors (certainty of accuracy of present and projected economic data relevant to the geographic location) were considered in addition to the four categories of location factors, were important to some firms, particularly those with small capital and technological requirements, while certainty factors, although important to some firms, did not appear to be related to a specific type of manufacturing activity. See: Ronald E. Carrier and William R. Schriver, *op. cit.*

extensive to interpret general trends in the geographic patterning of manufacturing activity. Thus it is hypothesized that Category 2 (Processing Cost Factors) has played the dominant role in attracting manufacturing development to the Southeast Region. This formulation, to be presented in the following section, was arrived at primarily from an investigation of the causes of manufacturing locations in Tennessee between 1955 and 1965 inclusive.²¹ The officials of over 300 manufacturing establishments locating in Tennessee during the interval under study were interviewed with regard to the factors responsible for the location, markets served, sources of raw materials and other conditions associated with their locational choice. The assumption is made that the Tennessee findings are generally transferable to the other component states since the states are more similar than dissimilar with respect to the variables under consideration. The dissimilarities within each component state are probably, in fact, greater than the interstate disparities.

III

The Causes of Industrialization in the Southeast: The Case of Tennessee

THE DATA TO BE UTILIZED in this investigation of causes of the recent migration of manufacturing to Tennessee will involve an analysis of the economic variables identified by the respondents as being important determinants of the site selection. During the period 1955-1965 inclusive, 327 manufacturing firms employing 25 or more persons each were located in Tennessee. Officials of each firm were contacted, and 307 firms granted interviews. In the structured interviews that followed, the respondents were instructed to name the most important factors (not to exceed six) in determining the location of the plant. The respondents were then instructed to distribute 100 points among the factors identified, showing the proportionate contribution of each factor to the total plant-location decision. Twenty-one economic factors were cumulatively identified (excluding the personal and certainty factors not discussed in this paper), and each factor was later assigned to the appropriate categories previously discussed.

Table 7 lists the location factors identified, their ranked frequency of identification and the ranked mean number of points assigned to each factor when it was identified by the manufacturing firms.

²¹ Ronald E. Carrier and William R. Schriver, *Plant Location Analysis: An Investigation of Plant Locations in Tennessee*, monograph published by the Bureau of Business and Economic Research (Memphis, Tennessee: Memphis State University, 1966).

analysis must be used in determining the importance of the location factors—frequency of identification and relative importance of the factor to those firms naming the factor as important. An inspection of the list of factors reveals that only one factor, Low Cost Electric Power, may be quantitatively different in Tennessee with respect to the other component states, since Tennessee only is served extensively by the Tennessee Valley Authority, resulting in substantially more attractive energy rates in that state.

From Table 7 it can be seen that, from both the view points of frequency of identification and relative importance when so identified, processing cost factors were most important in attracting manufacturing establishments to Tennessee with Low Cost and Availability of Labor being the single factor of over-riding importance. Low Cost of Electric Power, Favorable Labor-Management Relations and Low Cost of Building and Land, ranking second, third and fourth, respectively in frequency, were important to a large number of firms, but they did not receive a large weight in importance. On the other hand, Available Existing Plant, Availability of Low Cost Raw Materials, and Greater Demand in Area, ranking second, third and fourth respectively in mean number of points, were not important to as many plants, but they tended to be very important to those that identified them. From Table 7 the reader can easily determine the importance of each of the other location factors identified.

For the purpose of construct validity, another set of independent data was collected from the same study population with regard to markets served from the plants and their major sources of raw materials. During the course of the interviews the respondents were initially requested to define verbally their principal market area and the geographic points of procurement of their principal raw materials and components. Again, at the termination of the interview the respondents were handed a map of the United States with the states outlined and were requested to circumscribe the principal market(s) served and the point(s) of procurement of major raw materials. If a discrepancy existed, the interviewer tactfully questioned the respondent and the final explanation was accepted.

It will be recalled from the earlier theoretical discussion that the location of manufacturing activity is, in large measure, a function of costs and revenues in relation to anticipated advantages in procurement, processing, distribution and revenue generation. Deductively, it obtains that, given a pattern of sources of raw materials and markets for a population

of manufacturing industries, certain statements can be made about the causes of their location. Table 8 reveals the markets served and sources of raw materials for the manufacturing establishments studied in Tennessee. The market and material sources were operationally defined as follows: each firm being assigned only one market classification and one source classification: (1) *markets*: local markets included all firms selling 50 per cent or more of their products within a 50-mile radius of their location; (2) local regional markets included all firms selling 50 per cent or more of their products beyond a 50-mile radius but within Tennessee or adjacent states; (3) non-local regional markets included those firms selling over 50 per cent of their products within the eastern half of the United States but not in Tennessee or adjacent states; (4) nationwide markets included those firms selling over 50 per cent of their products outside the eastern half of the United States in either discrete or continuous markets; *raw materials*: (1) local sources included those firms procuring over 50 per cent of their raw materials within a 50-mile radius of their location; (2) local regional sources included those firms that procured over 50 per cent of their raw materials within Tennessee or adjacent states but not within a 50-mile radius of their location; and (3) non-local regional sources included those firms procuring over 50 per cent of their raw materials outside of Tennessee and adjacent states.

Table 8 shows that the modal pattern was non-local regional markets with non-local regional sources of raw materials. Only 55 firms (18.2 per cent) had primary markets in Tennessee or adjacent states, while 138 firms (45.4 per cent) had material sources in Tennessee or adjacent states. The conclusion, however, is not made that the plants were attracted to Tennessee by anticipated savings in the procurement of raw materials, but that the raw materials were obtained at the nearest possible point and, many being available in Tennessee and adjacent states, were purchased from that area. Two findings substantiate this latter point: (1) only 16 firms were located within 50 miles of their primary sources of raw materials; and (2) further study showed that the majority of the firms procuring raw materials from a local regional source were apparel firms that received cloth goods from North Carolina, and this same group of firms consistently assigned the greatest frequency and weight to Low Cost and Availability of Labor.²²

Table 8 shows the greatest percentage of firms concentrated among

²² *Ibid.*, pp. 196-99.

non-local regional and nationwide markets receiving raw materials from local regional and non-local regional sources. Since sales and purchase linkages are predominantly interregional, the best inference is that forces other than procurement costs, distribution costs, or location demand considerations were operating to attract plants to Tennessee. This is in agreement with the analysis of stated location factors previously discussed.

This is not to say that the plant locations considered here were totally independent of procurement, distribution and location demand considerations even among those firms reporting almost solely the importance of processing cost factors. A separate analysis, not reported upon here, revealed that firms in the food and kindred products industry, and stone, clay and glass products industry were frequently attracted to raw materials in the Southeast, while other firms in the food and kindred products industry (with perishable products), and some firms in the paper and allied products industry and the printing and publishing industry were strongly attracted to Southeastern markets.²³ Nevertheless, anticipated savings in processing costs, particularly labor costs, appear to have been paramount in attracting the majority of new manufacturing establishments and employment to Tennessee and, by inference, to the Southeast Region. The pattern of locations generally far removed from markets and sources of raw materials suggests that the obvious diseconomies of increased procurement and distribution costs or decreased location demand resulting from this pattern were more than compensated for by relatively greater economies derived from savings in processing costs.

At the same time that deglomerative forces were ascending in the Northern manufacturing belt as a result of increased demand in an area of scarce and expensive productive factors, notably labor, land and capital, a large pool of unemployed workers was being created in the Southeast Region from structural changes in agriculture. Due in large measure to the availability and low cost of labor in the Southeast Region and the early development of many external economies such as public bond issues for manufacturing buildings, land and equipment,²⁴ tax concessions, increased investments in transportation, educational systems and public power in the case of Tennessee, the region developed a strong compara-

²³ Carrier and Schriver, *Land Economics*, *op. cit.*

²⁴ The enabling legislation allowing counties and towns to issue tax-exempt municipal bonds for facilities leased to manufacturing firms has been extensively used in all component states, and has effectively lowered development capital costs while increasing its availability. At the time of writing, however, the tax-exempt status is being rescinded or highly restricted by the United States Senate and Treasury Department.

tive advantage in processing costs that accommodated the distal extension of the zone of marginal production southward from the traditional manufacturing states of the North. Local and regional public policies encouraging manufacturing development in the region appear to have been effective in strengthening this comparative advantage, although whether it was by prescience or accident is open to some debate.²⁵

During the 1960-1967 interval alone, 3,000 manufacturing establishments have located in the Southeast Region, resulting in the initial employment of 306,662 persons.²⁶ It is estimated that approximately 95 per cent of these locations were branch plants of established firms outside the region, the remainder being relocated firms and new firms. A similar location pattern during the 1950 decade, although perhaps of less magnitude, and the expansion of these plants subsequent to location have been primarily responsible for the great employment gains in manufacturing reflected upon in an earlier part of this paper. As the productive factors, particularly labor, become more extensively employed, the present comparative advantage in processing costs may disappear. This may lead to a different growth strategy in the region predicated upon the market attraction of increased aggregate demand, resulting from the extensive factor utilization accomplished in the former stage of growth, and the external economies of agglomeration as the region becomes more specialized in manufacturing. If the reader will allow one more digression, the thesis of this paper leads to the interesting proposition that while past economic growth in the region was not dependent upon general population growth, its future economic growth may be highly associated with large population increases as both cause and effect, since new employment opportunities will deter out-migration and a market and service orientation will be at least partially predicated upon population growth, particularly in urban centers.

IV

Economic Change and Societal Change in the Southeast: Some Comments

THAT THE PREVIOUSLY DESCRIBED economic change will result in social change in the region is patently clear, but the processes and direction of change are worthy of comment. Although it is equally clear that endogenous forces have and will affect change in the new economy of the

²⁵ See W. E. Laird and J. R. Rinehart, "Neglected Aspects of Industrial Subsidy," *Land Economics*, Vol. 43 (February, 1967).

²⁶ Tennessee Staff Division for Industrial Development, Research Section, May, 1968.

region, we shall concern ourselves here with the former and not *vice versa*. Since the growth in manufacturing primarily resulted from the voluntary adoption of organizations and technologies developed outside the region, the establishments themselves will become forces of change. But equally important, the very conditions that emanate from manufacturing employment, as opposed to agricultural, and the interactive consequences are deserving of notice.

Societies have been typed according to the degree of rurality or urbanity as reflected in values, norms and interactions. Implicit in the works of Tönnies,²⁷ Weber,²⁸ Simmel,²⁹ Redfield³⁰ and Wirth³¹ is a typological system of rural-urban differentiation. Whether one speaks of *Geimeinschaft-Gesellschaft*, *zweck-rational*, rural-urban continuum or Urbanism as a Way of Life there exists an underlying thesis of rural-urban differentiation. The essential elements of rural-urban contrasts are, in terms of urbanity: (1) more economically rational, bureaucratic and legitimate; (2) personal relationships and interaction are more contractual, segmentalized and anonymous; (3) greater social stratification with increasing emphasis upon occupation; (4) more complex division of labor and individual dependence; (5) more social and geographic mobility; and (6) more secular beliefs and acceptance of deviance.

It is not unreasonable to assume that the value and interaction definitions of the region will change with respect to these variables and others as increased industrialization brings about increased geographic and psychological urbanization. Directly, the increasing concentration in non-agricultural employment will place large numbers of workers in close physical proximity to each other, increasing the opportunity of interaction among a broader base than before possible under the conditions of agricultural employment. Then, too, the conditions of non-agricultural employment are different and will impinge upon the rural way of life as employee-employer relations become more contractual, impersonalized and time-oriented (as opposed to task-oriented) and as workers spend less time on the job.

²⁷ Ferdinand Tönnies, *Community and Society—*Geinschaft und Gesellschaft** translated by P. Laslett (Ann Arbor: Michigan: Michigan State University Press, 1957).

²⁸ H. H. Gerth and C. Wright Mills (translators and editors), *From Max Weber*, New York: Oxford University Press, 1958).

²⁹ N. J. Spykman, *The Social Theory of Georg Simmel* (New York: Russell and Russell, 1964), 297 pp.

³⁰ Robert Redfield, *The Little Community* (Chicago: The University of Chicago Press, 1955).

³¹ Louis Wirth, "Urbanism as a Way of Life," *American Journal of Sociology*, Vol. 44 (1938-9).

Indirectly, as public and personal income increase due to the more efficient employment of resources, public and private consumption of goods and services will increase, significantly altering the old style of life. Increased public investments in education, transportation and health will not only serve public consumption, but they will also serve as external capital investments to the economy, lowering the cost of "doing business" in the region. Increased private savings and the institution of credit, as a consequence of more productive employment, will in part alleviate substandard housing and further increase the consumption of durable goods.

Worthy of some speculation are the effects of the adoption of the "foreign" economic organizations characterized by greater bureaucratization, entrepreneurial development and production technology. Adoption of the techniques by indigenous firms, particularly those in the service industries having direct relations with the new manufacturing firms, may become prevalent and increase the economic efficiency of those firms. At the individual level, not only may the concept of economic rationality be placed in a higher position in the value hierarchy, but the very exposure to the new methods of organizing economic production may facilitate the acutely needed development of local entrepreneurship and innovation.

At this point an interesting question arises that is worthy of extensive research. With regard to the key management and production personnel moving into the region with the new plants, do these personnel become isolates or influentials in their respective community power structures? Certainly their involvement in community affairs could be catalytic, leading to either desirable or undesirable change from the viewpoint of the community, depending upon the divergence of interests between the affiliate firm and the community on the one hand and the motives of the individual on the other.

In summary, the Southeast Region is becoming urbanized as a consequence of increased industrialization. The urbanization is both geographic and psychological, the latter not being limited to the former. Geographic urbanization is increasing as new employment opportunities are concentrated as opposed to the formerly dispersed agricultural employment. Urbanism, although facilitated in populous areas, extends even beyond as the social systems accommodate industrialization.

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Kibbutzim and Communism

SOCIOLOGISTS ARE TRYING to find out why the *kibbutzim* (co-operative rural communities) of Israel are so successful. Productivity appears to be higher than in places where high monetary rewards are offered as an incentive; in the kibbutzim there are no monetary rewards as the residents receive their goods and services from the community.

The socialist principle "from each according to his ability, to each according to his needs" has been a conspicuous failure elsewhere, and high money wages have been a much more reliable inducement to produce. In seeking to explain the apparent exception in the case of Israel, sociologists might try the following considerations:

Residents of the kibbutzim are there because they want to be there, and this voluntarism is a far different thing from the forced "co-operation" imposed upon collective farms in communist States.

Family ties are strengthened in the kibbutzim rather than weakened. There is also the strong bond of the Jewish religion.

Land in the kibbutzim is treated as common property, and the rent is returned for communal purposes. Thus the foundation is right. Managers in the kibbutzim are neighbours, and responsibilities are rotated. Thus the residents are all in it together and are not at the whim of a remote bureaucrat.

It is not surprising that money rewards no longer work miracles of productivity in today's society, where inflation steadily erodes the value of money, where the individual feels isolated, aimless and lost in the giant cogs of industry, and where getting rich without working is held to be a great goal. In the kibbutzim, there is security along with fellowship, social acceptance and approval—and these should not be underestimated as incentives. [From *Land & Liberty*, London.]

Education for a Better World

THE UNITED NATIONS CHILDREN'S FUND is well-known for its life-saving activities in the fields of child nutrition, mother-and-baby care, control of epidemic childhood diseases, and disaster relief. But it is not enough to protect children from disease or disaster; they must also be protected from ignorance. So about 38 per cent of UNICEF's resources go into the fields of education and vocational training. Every child needs the right kind of schooling, so that he can grow up to become a productive adult, able to make constructive contributions to the world's progress. Help UNICEF help children help the world!

Moneylending in Rural Areas of Latin America:

*Some Examples from Colombia**

By CHARLES T. NISBET

I

Introduction

MANY WRITINGS on less developed countries refer to the existence of poorly developed money markets.¹ When focusing on the rural sector, studies point out the plight of the rural peasant at the hands of the merchant-lender, *e.g.*, "small loans have to be obtained through moneylenders who are often little better than extortionists."² Typically high interest rates are mentioned to dramatize the disadvantageous position of small farmers.³

In the case of Latin America, a survey of studies reveals the scarcity of empirical evidence on informal credit transactions (*i.e.*, credit supplied by village store owners, itinerant traders, moneylenders, neighbors, relatives, landlords and friends), despite the importance of this type of credit

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¹ See, for example, Hideo Kurosaki, "Characteristics of Finance in Underdeveloped Countries," *Developing Economies*, Vol. 1, No. 2 (July-December 1963), pp. 35-49, and Hugh T. Patrick, "Financing Development and Economic Growth in Underdeveloped Countries," *Economic Development and Cultural Change*, Vol. 14, No. 2 (January 1966), pp. 174-89.

² Y. S. Brenner, *Theories of Economic Development and Growth* (New York: Frederick A. Praeger, 1966), p. 249.

³ U Tun Wai, "Interest Rates Outside the Organized Money Markets of Underdeveloped Countries," *Staff Papers of the International Monetary Fund*, Vol. 6, No. 1 (November 1957), pp. 80-142; Richard C. Porter, "The Promotion of the 'Banking Habit' and Economic Development," *Journal of Development Studies*, Vol. 2, No. 4 (July 1966), pp. 353-54; Anthony Bottomley, "The Structure of Interest Rates in Underdeveloped Rural Areas," *Journal of Farm Economics*, Vol. 46, No. 2 (May 1964), pp. 313-22; and A. G. Chandavarkar, "The Premium for Risk as a Determinant of Interest Rates in Underdeveloped Rural Areas: Comment," *Quarterly Journal of Economics*, 79 (May 1965), pp. 322-25.

in countries with poorly developed money markets.⁴ In this paper I shall offer empirical evidence of the existence of informal credit and examine its implications for government attempts to grant institutional credit to farmers who have traditionally relied on informal credit.

II

Moneylenders: Suppliers of Informal Credit

DURING A SAMPLE FIELD SURVEY of Colombian farm operators,⁵ nearly 60 per cent of the 459 farmers interviewed claimed to have borrowed funds from informal credit suppliers, *i.e.*, landlords, itinerant traders, friends, neighbors, relatives, village store owners and moneylenders, during the previous three years. This section describes the nature of credit transactions involving one of these suppliers: moneylenders.

Farmers were asked whether they preferred to utilize credits of private or state banks. Of the 458 farmers responding, 12.4 per cent of the farmers preferred the private bank; 44.9 per cent, the state bank; 3.5 per cent preferred both and nearly 40 per cent claimed they preferred neither one.

Farmers were also asked to choose between banking institutions and moneylenders as a source of loanable funds. Moneylenders were the most preferred source with 52.8 per cent of the farmers expressing a preference for them. Only 8.3 per cent were undecided, with the balance, 38.9 per cent, favoring banking institutions.

Why did so many farmers prefer not to transact with either banking institution? Why did over half of the farmers prefer to negotiate with moneylenders rather than banking institutions? It might be asserted that socio-economic status influences the choice of credit supplier.

Table 1 shows farmer preferences for banking institutions versus moneylenders distributed according to farm size. Nearly 50 per cent of all farmers within each farm size group preferred moneylenders to banks, with the exception of those farming properties less than three *fanegadas*.⁶

⁴ In Venezuela, for example, 55 per cent of agricultural loans (in 1960) came from non-institutional sources, *i.e.*, moneylenders, traders, landlords, relatives and friends. U.S.D.A., *Changes in Agriculture in 26 Developing Nations: 1948 to 1963*, Foreign Agriculture Economic Report, No. 27 (November 1965), p. 82. Moneylending, of course, is now restricted to the so-called underdeveloped countries. For a discussion of moneylending in the United States and its relation to crime, see L. J. Kaplan and S. Martels, "Economics of Loansharking," *Am. J. Econ. Sociol.*, Vol. 27, No. 3 (July, 1968), pp. 239-52.

⁵ The field survey was conducted in the Department of Cundinamarca, Colombia, during the summer of 1963. A quota sample was drawn of 458 farm operators selected on the basis of land size, soil quality, geographical location and proximity to local markets. The sample represented about two per cent of all farm operators in the study area.

⁶ 1 fanegada = .63 acres.

If farm size can be accepted as some indication of socio-economic status (94 per cent of those interviewed were farm owners) then we must look elsewhere for the reason moneylenders are preferred to institutional lenders.

Table 1

FARMER PREFERENCES FOR BANKS VERSUS MONEYLENDERS

Credit Source	Distributed According to Farm Size (in fanegadas)				Total
	Less than 3	3-15.9	16-77.9	Over 78	
Banks	86	66	21	5	178
Moneylenders	140	74	23	5	242
Unknown	25	9	4	0	38
Total Cases	251	149	48	10	458

SOURCE: Sample field survey of 458 Colombian farmers.

The answer lies, I believe, first in the lending conditions and circumstances existing in the institutional credit market and, second, in the responses of the farmers themselves.

Many of the smaller farmers did not have access to credit from the private bank because loan applications are not accepted from farmers unless they hold time or demand deposits. Other farmers did not utilize credits of the state bank because applicants were generally required to anticipate the date of loan disbursement by as much as six months. Several medium and large farmers claimed that neither banking institution loaned on short notice (loan applications go to Bogotá for approval) and often the banks stood at their loan limit with no indication when operations would resume.

Farmers' responses clearly point out the origin of their preferences for moneylenders over banks. The following sample of responses from operators of various sized farms includes farmers with varying years of education and those who have and have not dealt with the institutional credit market.

"They (moneylenders) are not as difficult to deal with."

"They (moneylenders) do not require so much paper work."

"After the Caja (state bank) would not lend, they did."

"I have to pay more interest, but they give more time to pay."

"They have more confidence in us."

"The Caja delays, but the moneylender says give me the note and take the money."

The application procedure for institutional credit is quite simple. The borrower talks personally to the moneylender about his financial needs. There are no applications or financial statements to fill out, no lines to stand in, no land titles to submit and generally no references to present.

The transaction is characterized by a face-to-face relationship. The borrower asks for the credit directly without preliminaries and the moneylender accepts or rejects the request immediately. A moneylender's willingness to discuss such topics as child-parent relationships, changes in the youth of today and the business of moneylending points up the personal character of informal credit. (See next section.) A typical response of a farmer was that the "moneylenders are the only ones that understand the needs of the campesino."

The interest rates charged by moneylenders ranged from 24 to 96 per cent annually. In contrast, the rate charged in the institutional credit market was from eight to 12 per cent annually. Two farmers claimed that some moneylenders tell a prospective borrower that all his (the moneylender's) funds are exhausted at the moment, but he "knows a friend" who has money invested at four per cent monthly. If the borrower desires, the moneylender will attempt to persuade his friend to drop his current investment and advance the funds to the prospective borrower at five or six per cent a month.

The vast majority (90 per cent) of farmers borrowing from moneylenders claimed that it was necessary to sign a promissory note in order to get credit. However, when the loan amount was very small only the verbal promise to pay was necessary. On some occasions the moneylenders would ask for a co-signer or a personal check as the guarantee for the loan.

In all cases payments of the loan began after the harvest and several additional months could be obtained without difficulty. In the following section, Mr. Díaz (moneylender) will display willingness to let the loan ride until José (borrower) has adequate funds to repay. Most moneylenders seemed satisfied to accumulate interest on loaned funds as opposed to turning over their capital frequently. The field interviews revealed no interest on the part of moneylenders in the ultimate use of borrowed funds; they seemed indifferent about whether the funds went for consumption or production goods.

III

Three Staged-Loan Applications from Rural Moneylenders

What is your procedure of obtaining credit from one type of informal credit supplier, the rural moneylender? The following three interviews will provide insight into this lending process.

During the field survey of agricultural credit in rural Colombia, a list of 200 different people who lent money to farmers for consumption and production purposes was obtained from farmers interviewed. From this list of known lenders and from conversations with local bank officials three

moneylenders were selected for the purpose of staging applications for informal credit.

The method of selecting the moneylenders to be interviewed was in no way random. Mrs. Castro (the first case reported) was a widow who carried on the management of her late husband's general store. She was owner of considerable village real estate and was involved in various commercial ventures. She was selected as an example of a rural moneylender whose activities centered around village business as opposed to agricultural business. She was still open to applications from farm operators for agricultural credit but did not specialize in this kind of lending. Mr. Gómez (the second case reported) was the owner of a large village store. He extended loans on his merchandise and individual cash loans. He was selected as an example of a moneylender who was a large village merchant. Mr. Díaz (the third case reported) was the best-known of all lenders in the study area. He was a landlord who was reputed to control a considerable amount of land in the area. He rented most of his land holdings and lived the majority of the time in one of the best houses in the town of Ubaté. He was selected as an example of a large landlord and moneylender. Although all interviews are true, the names used are fictitious.

The procedure utilized in the staged-loan applications was as follows: I attempted to contact farm operators who had previous dealings with moneylenders but no satisfactory informant was willing to participate in the interview. Therefore, I turned to the man who was to become my research assistant, José Lopez, the son of an owner of a *papelera* (a small book and stationery store) to approach the moneylenders for short-term credit. Since José and the lenders were residents of the town of Ubaté, all parties knew each other (a condition that is necessary for most informal credit transactions). Because José was not a farmer and his family had no agricultural undertakings, I thought it best to seek funds for a commercial venture (it was known from the field survey that the largest moneylenders extended credit to individuals engaged in agriculture, commerce and small industry). Immediately after each interview José was to write down to the best of his recollection the complete conversation with the moneylender.

The first moneylender visited was Mrs. Castro. The following conversation resulted from José's⁷ attempt to borrow 100 pesos for 30 days.⁸

José: I urgently need some money and I would like to borrow it from you if possible.

⁷ This was the first time that José had ever attempted to obtain informal credit.

⁸ During 1963, ten pesos were equal to about U.S. \$1; Banco de la República, *Revista del Banco de la República*, Vol. 36, Nos. 423-434 (January-December 1963), Bogotá.

Mrs. CASTRO: I am really sorry, Mr. Lopez, but I cannot do you that favor right now. I am involved in a construction job in Bogotá and had to borrow money from everybody here and in Bogotá. I borrowed 50,000 pesos from the Banco Central Hipotecario. I owe 35,000 pesos to several people and I use all I get here to pay my debts, and I also have to pay for the education of my children. I am glad I don't have to pay for the eldest one, but I should send him some money.

But, of course, if I had the money, I would be very happy to give you some. For example, I owe Mrs. Martinez 50,000 pesos, and I hate to make her wait any longer, because she doesn't ask for any interest.

Yes, sir, if my husband had not left that construction job when he died, I would have had to leave this general store a long time ago.

José: It's too bad because I need the money, and it is not much. I have the names of some persons who would lend me some, but I don't know any of them and none of them knows me. I need to find a person who would trust me.

Mrs. CASTRO: Yes, that's the problem. They will lend you money, but they will ask for a co-signer. Wouldn't your father give you some money or don't you want him to know about it? If I didn't owe Mrs. Martinez that money I would send you to her. There is a Mrs. Contreras. She lends money and asks for interest, according to some papers that I have seen, but not for a co-signer. Go and see her.

The second moneylender visited, Mr. Gómez, appeared suspicious of the request for credit, apparently because several of his clients had informed him there were people in the *veredas* (outlying communities) asking questions about farm operators' credit activities. The following conversation with Mr. Gómez is an excerpt of José's attempt to obtain 100 pesos for 30 days.

José: I would like to ask you a favor.

GÓMEZ: If there is anything I can do for you, I'll be glad to do it.

José: It's very simple. I have the possibility of a very good piece of business, but I need money right away to back it. I was told that you could do me that favor, and that's why I am here to see if you can lend me the money.

GÓMEZ: Well, to be quite frank, at this moment I'm not in any condition to lend any money. I just had to sell a number of calves to pay off a debt. I don't think I'll have any money until the 15th of August (30 days later) by which time I hope to have collected some money.

José: The problem is that I'm in immediate need of money. I must get it without delay and, anyway, the amount is very small.

GÓMEZ: About how much would you need?

José: 100 pesos that's all

GÓMEZ: What! Oh, no! Is this some sort of joke? That's impossible, I thought it would be thousands, at least 1,000 pesos. No, no. Any friend can lend you that amount. Well, anyway, I won't have any money before the 15th of August.

(José asks for and obtains the names of three other persons who lend money.)

José: And what interest do you think they'd charge me?

GÓMEZ: Everybody pays two per cent a month!

For the third staged-loan application the amount of the loan was raised to 500 pesos and the term shortened to 15 days. Since Mr. Díaz, like Mr. Gómez, was reputed to be an important lender, we thought it advisable to alter the size and term of the loan. The loan request to Mr. Díaz resulted in two interviews on two different days. The result of the first day's conversation was as follows.

José: Mr. Díaz, it so happens that I'm in urgent need of some money. I committed myself to help a friend buy some merchandise that he can get extremely cheaply, realizing an immediate profit. Unfortunately, I don't have enough cash and my friend already signed a contract. The seller won't give him credit, so I need money urgently. Yesterday I went to see someone else who lends money, but he told me he wouldn't have any until August 15th. So I came to ask you today.

Díaz: (Smiling) That's the way it is, you know, everybody claims that they don't have any money, not until next month, not until the 15th. I don't know what's happening, but things are really bad. I was just talking to my friend (sitting across the room) about the same thing. He owes me some money, and I'm not even asking him for it. He's invested in some cattle and we were talking about how bad things are at present. Everyone's in a tough spot.

José: But Mr. Díaz I don't need a large sum of money. Only 500 pesos. You certainly could take that out of your savings.

Díaz: My savings! I tell you, I'm waiting to be paid myself. We're all in a tough spot.

José: Well, that's a problem, because you see I'm in urgent need.

Díaz: Not only you, the general state of affairs is really terrible. Lending money is a very special problem these days. Someone needs money; to lend it to him I've got to sell a pair of oxen. Knowing how that goes, I lose 200 pesos a head, all in order to gain a few cents of interest on a loan. It's worth it. Now if I lend you 500 pesos, I'll make some 30 pesos in a month. That's all I get paid, while with that money I can make the same profit myself in a week. It is the same as in your deal. You ought to be making at least 30 per cent.

José: I'd only need the money for two weeks.

Díaz: Fine, but I tell you, I don't have the money. And anyway, I often come out losing since what I get paid is insignificant. Often I don't get paid at all and lose everything.

José: That wouldn't happen, Mr. Díaz. Since I need the money desperately, I'm willing to give you any guarantee you want. What interest do you charge? How much do you want for the two-week loan?

Díaz: For two weeks? Let's see. For that, 20 pesos, that's all.

José: Fine, Mr. Díaz. I need the money, so I think that will be all right.

Díaz: Now tell me, do you have a check, a check book?

José: No, sir, I don't.

Díaz: Can't you see? That's exactly the problem. How can I lend you any money if you don't even have a check book? Trusting your honesty means nothing. In fact, never! In commerce, for example, a wholesaler or distributor might give a store credit, and if it isn't paid, they can take the store. But me, what can I do? If I'm not paid, what can I take?

José: No, no, Mr. Díaz. That's why I asked you what guarantee you desire.

DÍAZ: Guarantees, guarantees—they're of no value. Promissory notes, for example. They come in here and say that here's the note, and they sign it. But if they have no backing, not even a bank account, then what good does that do? If only youth were what they used to be. If one were sure of their honor, then one could trust them. But nowadays youth is so full of pride and so affected that I who am old and experienced would never trust them. For example, the other day, this so-and-so from Chiquinquirá (a nearby town) came with a recommendation from a big man around here. He came so that I would undersign a loan. Then I went to talk to a lender who told me that perhaps I should lend the boy the money and that he would co-sign the debt. So I lent the boy 4,000 pesos, and the other man co-signed the promissory note. Of course, the undersigned ended up paying all the money. That's what he got for helping his god-child. This guy, looking so fine and talking so convincingly, went off with the 4,000 pesos.

JOSÉ: Oh, no, Mr. Díaz! Not that, I wouldn't do that!

DÍAZ: I'm not saying you would, but only that youth is not like it used to be when one could tell a young man, "Take the money," and without guarantees, "Go use it for your business." In a short time, the young man would come back himself to pay. Today, do the same thing and see what happens. Today, all young people do is go around looking for someone they can fool. Don't take me wrong, I'm not saying this about you. I'm only telling you this so that you'll know how people are nowadays, so that you won't let anyone fool you.

JOSÉ: Then what is it you want?

DÍAZ: Can't your father lend you the money?

JOSÉ: I don't want him to get involved in any of my dealings. They're only my business.

DÍAZ: You're wrong in saying that. One should know what one's children are up to. When my son, for example, made that deal for trading in foreign cars so very cheap, I found out about it accidentally and I bought one for him, and now he is working. Now the business is going very well. When the children want help, one should offer it. Not like my father who didn't help me in anything—and I remember that so well!

JOSÉ: The trouble is I think my father is in some financial trouble, and I don't want to bother him with this.

DÍAZ: But doesn't your father have a bank account, a check book? I think he does.

JOSÉ: Yes, he does, but I think he has only a few cents, the very minimum. (Pause)

Tell me, Mr. Díaz, in order to get money from the bank does one have to have a fat account?

DÍAZ: Yes, you sure do. Otherwise, they won't lend you anything.

JOSÉ: Well, let me not take up any more of your time. Tell me, Mr. Díaz, what's your opinion of my loan request?

DÍAZ: I will lend you the 500 pesos if your father makes a check out to me dated August 15th. That's all. Those are the only conditions under which I can lend you the money. You see, I know a lot about this business and have had a lot of experience in it. I want to help you, to help a young man like you who's just beginning to do business and trying to make a few cents.

JOSÉ: Thank you, sir, I'll go talk to my father and see what he thinks and find out if he has money in the bank.

DÍAZ: Oh, don't worry about that. If you need the money and don't have it right now,

date the check for when you will have it and on that day deposit the money. It's easy to deal with checks. That's the advantage of a bank. (His friend agrees).

José: Fine, Mr. Díaz. I'll talk to Father and come back tomorrow.

Díaz: Yes, go check on whether it can be done that way.

Since Mr. Díaz made consummation of the loan conditional upon getting a post-dated check from José's father, we took advantage of the time to plan our strategy for a second trip to the moneylender's house. The interest of 20 pesos for 15 days represents annual interest of 96 per cent, or eight per cent monthly. Interviews with farmers in the countryside provided us with an average annual interest rate of 24 per cent on loans from moneylenders. We were interested in seeing if Mr. Díaz would come down at all on his interest charge. José was instructed to suggest that the interest be ten pesos instead of 20 for 15 days. José returned to say his father was in agreement with everything except the interest. The following is the result of the return visit to the home of Mr. Díaz.

José: Mr. Díaz, I've come back to ask you for a concession on the interest that you asked for the 500-pesos loan.

Díaz: What can it be?

José: I've come to see whether you can give me the two-week loan for ten pesos.

Díaz: What? No! No! No! People think that I have money to lend, but, no, sir, my money is for business deals, just like the one you're involved in now. Look, with the 500 pesos I lend you I could easily make some deal and profit much more than you would give me and in less time. I'm not here to give money away. I know this business. If you think that you can make 50 pesos with your deal, then take 30 pesos and give me 20. If that's not the case, then your deal is not worth the trouble. I could buy two calves, sell them on the spot the same day and make more than that.

José: Then you can't lend me the money for ten pesos?

Díaz: No! Impossible! Didn't I tell you that I know how to do business? Don't you see I've been making deals ever since I was your age? I want you to learn too. I've been working with credit since I was a boy and I know what I'm talking about. I'm trying to teach you what you don't know.

José: But I thought you could lend me the money for a little less.

Díaz: I can't. Go to one of those idiots who lends at two per cent a month. That I won't do so everyone can get rich on my money. I like to help people make a profit if I make a profit too. I'll lend you the money for a good deal if you'll give me a good part of the profits. If you make more than me, fine. But if you're going to make 25 pesos and then pay me 20, it's not worth your while.

José: But you're asking for too much!

Díaz: It might seem that way to you, but it doesn't to me. With the same money I could make a better profit in a single day. That's what I'm trying to teach you. Look I just sold a finca (farm) for 70,000 pesos when I bought it for 10,000 pesos 15 years ago. That sort of profit is only a dream to you, but it's the sort of thing that I'm accustomed to. The house you live in I sold myself, and also at a profit. I'm offered houses that I can't even cope with. I have so many. But even if I don't need a house, I'll buy it if I can sell it for more.

José: That's a matter of time.

Díaz: Sure, but I can buy a finca and sell it a few days later. Tomorrow I can go out to the plaza, buy myself two calves for 500 pesos and sell them right there, the same day, and make more than 50 pesos profit.

José: Then you definitely can't lend me the money under those conditions?

Díaz: No. As I told you, I have the money for good deals and not to lend it out for peanuts. Only under my conditions will I lend you the money.

José: Well, in that case, I am sorry for having bothered you so much.

Díaz: No, no. What is there to pardon? I'm always at your service.

The preceding three staged-loan applications provided some insight into the nature of informal credit transactions in rural areas. The following section will explore the implications of the empirical findings for new credit programs.

IV

Implications for New Credit Programs

THE EMPIRICAL INFORMATION presented on the nature of informal credit in rural Colombia has implications for new credit programs. Although not explicitly recognized by past experiences, new credit programs are generally directed toward those rural peoples presently involved in informal credit markets and not usually toward small farmers currently clients of the institutional credit market.⁹

Before governments or private lenders begin launching full-blown programs of supervised credit or some variant of credit extension to small farmers, preliminary field studies should be undertaken. Such studies are needed to determine what particular system or systems of informal credit are presently in operation in the rural sector.

Supervised type credit programs have been in operation in Latin America since 1943. Most of these programs received funds from external sources such as the Agency for International Development and the Inter-American Development Bank. These lenders have had little information before them on the existence of informal credit markets in rural areas of Latin America. Loan officers from these lending institutions, therefore, have not been in a position to analyze rigorously the loan applications presented by local governments from Latin American countries. The loan requests presented reflected little awareness or understanding of the operation of informal credit in their countries.¹⁰ At best some information was

⁹ INCORA, one of Colombia's supervised credit programs, provides an exception. When INCORA began operations most of its clients came from Caja Agraria (state bank). INCORA selected clients of the Caja Agraria with the best records of loan repayment.

¹⁰ See, for example, the Chilean loan request to the Inter-American Development Bank, Instituto de Desarrollo Agropecuario, *Proyecto de Crédito Agrícola al Sector de Bajos Ingresos: Solicitud de Préstamo al Banco Inter-Americano de Desarrollo, Santiago, INDAE, 1965.*

the cash necessary to meet their consumption needs or even to meet their daily labor expenses.

3. Most supervised credit programs, despite more generally stated aims, principally grant credits. In too many areas this does not solve the problem of the farmer who belongs to the traditional low income sector. This farmer may find himself caught in a so-called marketing trap. That is, in some rural areas village buyers of produce are also the lenders of production inputs. The small farmer going to the new institutional lender for a crop loan loses his market outlet for produce at harvest time. After a year of this experience the small farmer will be very resistant to accepting any further short-term credit from the institutional market until he is certain of a market for his produce independent of the village merchant.

4. In some Latin American countries the ratio of farmer clients to agricultural technicians precludes individualized technical assistance. In Chile, for example, the ratio of clients to agricultural technicians in 1965 for the Institute of Agricultural Development—INDAP—approached 65 to one. INCORA's supervised credit program in Colombia had a client-supervisor ratio of about 80 to one in 1965.¹⁴ These ratios seem too high to make the technical assistance aspect of new credit programs really effective because farmers receiving assistance for the first time need individual attention. New credit programs do not have the financial resources available to give highly individual attention. The result is that group classes are held to pass on technical assistance. But farmers find it difficult to apply group teaching to their individual problems. Until some way is devised to handle better individual needs of small farmers lacking technical knowledge, the adoption and continuous future application of new farm technology will probably be minimal in rural areas of Latin America.

5. In some countries the application procedure for new credit programs is merely a carbon copy of that existing in the institutional credit market. After a few weeks or months the employees of the credit program realize that these credit procedures have little or no applicability when dealing with small farmers. For example, the State Bank (Blanco del Estado) of Chile utilized an eight-page application form for small sharecroppers of the central valley. Many of these sharecroppers could not read the eight-page application form, or even if they could read it, few could understand it, let alone fill it out with adequate information. North the employees of the State Bank applied a supervised credit form that had been utilized successfully in Europe. Again the result was unsatisfactory. This form had little meaning in a very particular situation in Central Chile.

¹⁴ Dale Adams, *op. cit.*, pp. 4, 135.

After six months of operation the employees of the State Bank finally realized that it would be necessary for them to design their own application form of about two pages to suit the needs of the particular kinds of clients they were serving, namely small sharecroppers.

6. Most supervised credit programs have thus far mainly provided only short-term (usually one year or less) production credits or crop loans. Little progress has been made in increasing medium- and long-term credits for semi-fixed and fixed capitalization loans.¹⁵ Such loans appear desirable if new production functions are going to be accessible to farmers whose current production function is unchanged from earlier years and probably unaffected by the new production credits.

7. In some Latin American countries supervised credit programs have not always benefited small farmers. INCORA's program in Colombia and the State Bank's program in Chile have serviced medium and large farmers. The pressure for successful programs and the lack of understanding of how to deal with small farmers has caused this lending emphasis. Also in some countries lending policies eliminate the majority of the farmers while in others the entire rural population is given access to supervised credit.

8. Finally, a hard look must be taken at the cost of supervised credit. There are hints that the cost may be quite high but thus far no conclusive evidence has been presented to enable a firm judgment. In Chile one study estimated that for every dollar granted in supervised credit, another dollar was required to bring forth the credit.¹⁶

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¹⁵ An exception exists in INCORA's supervised credit program in Colombia where nearly 50 per cent of all credits granted went for investments in cattle, fences, machinery, wells, buildings and slow-maturing crops. Dale Adams, *op. cit.*, pp. 18, 53.

¹⁶ Hernán Burgos Mujica, "Análisis Económico Agrícola para un Plan de Crédito Supervisado: Comuna Navidad," unpublished thesis, University of Chile, Santiago, 1962.

Improving the Situation of the Children

IN THE DEVELOPING COUNTRIES, nearly half the population are under 15 years of age. Approximately three-quarters of the world's children live in areas where the average income is less than \$500 a year. The United Nations Children's Fund helps provide better food and medical care for these youngsters while their parents struggle to end land monopoly and other special privileges which impoverish them.

J. S. Mill on Alternative Economic Systems

By DONALD L. LOSMAN

JOHN STUART MILL was not only one of the great economists of his day, but one of the most knowledgeable minds as well. He was a social philosopher with a critical eye for examining, explaining, and improving the society of his time. It is the primary purpose of this paper to inquire into Mill's beliefs concerning alternative economic systems; that is, the systems popularly called capitalism, socialism, and communism. A secondary purpose will be to examine the influence and effect of Mill's thought in these controversial areas.

A dichotomy of opinion seems to exist concerning the proper "label" which should be attached to Mill. He stands at the half-way point between the classical and neo-classical schools and the general consensus seems to be that, while most of his life he was basically an advocate of laissez-faire capitalism, during his later years he leaned heavily, if not wholly, towards some form of socialism. One author writes: "He was a firm believer in capitalism, yet he showed strong convictions on social reform with 'Fabian' socialist tendencies."¹ Jacob Oser, in his popular history of economic thought, notes that "Mill called himself a socialist. From his *Autobiography* we can see that he leaned toward utopian socialism. . . ."² Richard T. Ely, the distinguished American economist of the early 1900s, places a brief discussion of Mill in his basic text between the subtitle "early socialism" and "scientific socialism." Later, he suggests that "Mill wavered between the old and the new. . . . In the end he became a moderate socialist. . . ."³ Similarly, Heibroner's discussion of Mill is reserved for the chapter entitled "The Beautiful World of the Utopian Socialists." In it he writes of "the ultimate conversion to socialism" of John Stuart Mill.⁴ These quotations demonstrate the general agreement among writers that Mill in his lifetime so departed from the liberal-classical tradition as to justify his being categorized as an advocate of socialism.

¹ J. F. Bell, *A History of Economic Thought*, 2nd ed. (New York: Ronald Press, 1967), p. 252.

² J. Oser, *Evolution of Economic Thought* (New York: Harcourt, Brace & World, 1961), p. 110.

³ R. T. Ely and R. H. Hess, *Outlines of Economics*, 6th ed. (New York: Macmillan Company, 1937), p. 1024.

⁴ R. L. Heibroner, *The Worldly Philosophers*, Time Reading Program, special edition (New York: Time Inc., 1962), p. 127.

The view of this essay, however, is that only by the very broadest definition of socialism can one properly describe Mill as a socialist. Such a definition must include under the socialist heading any who had criticisms of his society. Only then can we label Mill a socialist, moderate or otherwise. Although in the past the term socialism "was applied to general schemes for social amelioration which did not involve any fundamental change in the organization of society,"⁵ today socialism implies radical departures not only from the theoretical capitalist model, but from the mixed system of contemporary American capitalism.

A consistent theme of this paper will be the thesis that Mill's criticisms demanded only minor modifications in the economic system—modifications which Mill suggested for the purpose of retaining and re-vitalizing the basic institutional framework of capitalism. To describe Mill as a socialist and mean much more than one who protested against certain existing defects would be to commit a misleading error. Contemporary texts, however, seem to suggest that Mill was a socialist not in the original sense, but rather in the contemporary sense which requires an abandonment of the institutions of capitalism in favor of a new order. Nothing, however, could be further from the truth.

Although Mill sympathized with many of the criticisms of St. Simon, Louis Blanc, and others, he remained skeptical. That he was disappointed with the operation of the economic system is patently evident. To this extent he sympathized with all who leveled justifiable criticisms at that system. And where he did not agree, he still respected and listened. The right to register dissent and the duty to listen is, of course, a major theme in his famous essay, *On Liberty*. Also, in attempting to learn and understand as much as possible, Mill exposed himself to the full gamut of conflicting influences—the classical economics of Ricardo, the utilitarianism of Bentham, the early socialism of St. Simon, Comte, and Fourier, and many others. The broad spectrum of influences to which Mill was exposed explains his eclecticism and seeming (or actual) inconsistencies. His economics basically remained in the liberal-classical tradition, although the conditions of his day and the diversity of influences upon him did result in "modifications which Mill felt it necessary to make in order to give his ideas a more humanitarian and social outlook."⁶

⁵ T. N. Carver, *Principles of Political Economy* (Boston: Ginn and Company, 1919), p. 540.

⁶ J. W. McConnell, *Basic Teachings of the Great Economists* (New York: New Home Library, 1943), p. 225.

I

Institutions of Capitalism and their Alternatives

TO INVESTIGATE MEANINGFULLY Mill's position concerning alternative systems, some basic definitions are necessary. It is perhaps easiest to define modes of organization in terms of the institutions which characterize them. Professor Blodgett suggests a five-fold institutional definition of capitalism.⁷ It is an economic system characterized by private property, freedom of enterprise, economic motivation, the price system, and competition.

Socialism, by the same criteria, tends to split the institutions of capitalism down the center, retaining some and discarding the rest. Private property is retained in consumer goods, but is replaced by public ownership in producer goods. Freedom of enterprise is similarly divided, with occupational choice left to the private citizen, but the right to found and operate businesses denied to him in favor of public enterprise. The role of economic motivation under socialism is reduced, but not eliminated. Wage differentials (less extreme than under capitalism) are retained; property incomes, eliminated. The use of money and a price system does not change; however, the market mechanism loses its allocative potency with respect to basic production decisions. Consumer purchasing decisions, of course, are still based upon relative prices. Finally, competition under socialism has a changed character in which its importance is greatly reduced. Inasmuch as competition under capitalism is the inevitable result of the free operation of the other institutions, to the extent that the latter are lacking, it is to be expected that competition assumes lesser significance.

As for communism, using the same criteria, we find even further departures: private property is totally abolished, as is economic motivation (since each is to be paid according to his need, wage differentials between and among occupations do not exist), while freedom of enterprise remains somewhat similar to its status under socialism—relatively free occupational choice in State employment. In all likelihood the use of money and prices is discarded. Finally, cooperation fully replaces competition.

The role and function of government is another point on which systems would differ. Under capitalism government tends to follow a laissez-faire policy, acting more as overseer than as participant on the economic stage; under socialism, the government makes the basic decisions of what goods are to be produced and in what quantities, determining the allocations of factors and strongly influencing the division of the national product.

⁷ R. Blodgett, *Comparative Economic Systems* (New York: Macmillan Company, 1949), pp. 21-48.

Under communism, government as we know it would be non-existent, with the exception of a few minor administrative units.

Given these basic institutional definitions, let us now examine the position of John Stuart Mill on each. To avoid confusion, however, it should be noted that Mill often used the terms communism and socialism almost interchangeably, although the basic distinguishing characteristics are the complete abolition of private property and the equal distribution of income under communism as opposed to socialism. As Mill himself wrote, "the word socialism, which originated among the English communists . . . is now . . . employed in a larger sense; not necessarily implying communism, or the entire abolition of private property, but applied to any system which requires that the land and the instruments of production should be the property, not of individuals, but of communities . . . or of the government."⁸

The institution of private property came under principal fire by the early critics of capitalism, most probably because of the highly unequal distribution of wealth and income. Proudhon was most vehement, declaring simply that "property is theft." Mill, while greatly disturbed by the unequal distribution of wealth, holds little against private property per se, with the possible exception of property in land. In book II of his of his *Principles*, Chapter I, he discusses the origin and role of property, noting that some form of individual property has historically been the mode of distributing wealth in almost all societies—the basic reason probably being the desire to repress violence and minimize quarrels. As societies advanced, property tended to become distributed in highly unequal portions. The inequality existing at any particular time, however, is not necessarily the result of the institution of property, but of other factors which have historically influenced the distribution of wealth, such as wars, conquests, and the like. Mill reasons that:

In considering the institution of property as a question in social philosophy, we must leave out of consideration its actual origin in any of the existing nations of Europe. We may suppose a community unhampered by any previous possession; a body of colonists, occupying for the first time an uninhabited country. If private property were adopted, we must presume that it would be accompanied by none of the initial inequalities and injustices which attend the historical operation of the principle in old society. Every . . . man . . . would be secured in the unfettered use and disposal of his . . . bodily and mental faculties; and the instruments of production, the land and tools, would be divided fairly among them . . . the

⁸ *Principles of Political Economy*, W. J. Ashley, ed. (London: Longmans, Green, & Company, 1909), p. 203.

division, once made, would not again be interfered with; individuals would be left to their own exertions and to the ordinary chances for making an advantageous use of what was assigned to them.⁹

Property rights in such a system would consist of the recognition of the exclusive right of producers to what they have created or received in trade. According to Mill the principle of private property does not necessarily require inequality—certainly not the degree of inequality which existed in his time or subsequently—although under the above conditions some inequality in both income and wealth distribution is likely to result. This is not to deny that Mill was upset by the poverty and suffering so rife in England. In no small way he blamed this on the unequal sharing of the national dividend. Indeed, almost 100 years after the beginning of the industrial revolution in England, he is alleged to have remarked:

Hitherto it is questionable if all the mechanical inventions yet made have lightened the day's toil of any human being. They have enabled a greater population to live the same life of drudgery and imprisonment, and an increased number of manufacturers and others to make a fortune.¹⁰

However, it is not the private property principle itself which is the cause of inequality. Concerning that principle, Mill takes great pains to point out that property rights have differed from society to society,¹¹ and that "No word has been the subject of more . . . misunderstanding than the word property."¹² There is nothing so sacred in such rights per se that they should not be changed if conditions so warrant. On the contrary, property rights have always, from a long-run point of view, been in a state of flux, a state of steady modification. And he concludes that this is all to the good. Further modifications are inevitable and are signs of the social system's good health.

II

Mill on the Rights of Ownership

WHAT ARE MILL'S VIEWS concerning the rights of bequest and inheritance? He seems to support the right of bequest, a gift after death, as a justifiable aspect of private property. However, the right of inheritance is questioned, if not denied.

That the property of persons who have made no disposition of it during their lifetime should pass first to their children, and, failing them, to the

⁹ *Ibid.*, p. 201.

¹⁰ Oser, p. 107.

¹¹ *Fortnightly Review*, 31 (1879), pp. 526-29.

¹² *Ibid.*, p. 527.

nearest relations, may be a proper arrangement or not, but is no consequence of the principle of private property.¹³

Mill did not favor collateral inheritance, agreeing with Bentham's suggestion that if no direct heirs exist, in case of intestacy, the property should become that of the State. The passing on of private wealth to indirect descendants or distant relatives simply propagates inequality, while the recipients themselves have no justifiable claim to receive. A property right, then, exists to bequest goods, but not to inherit them, except for the just claims of children to a decent education and

such appliances and means, as will enable them to start with a fair chance of achieving by their own exertions a successful life. To this every child has a claim; and I [Mill] cannot admit that, as a child, he has claim to more.¹⁴

Given these feelings, it is not surprising that Mill advocated taxation of inheritances.

Mill also had some misgivings concerning private property in land, for land is a gift of nature and not the result of the industry of individuals. Land, however, is not usually productive in and of itself. It requires an application of labor and it is here that the dictates of practical necessity allow private property. "The use of land in agriculture must indeed, for the time being, be of necessity exclusive; the same person who has plowed and sown must be permitted to reap."¹⁵ In addition, since an investment of effort and sacrifice must usually be made, the fruits of which are spread over a number of years, "A holder will not incur this labor and outlay when strangers and not himself will be benefited by it."¹⁶ For these reasons, then, private property in land is a necessity, although such reasons Mill considered valid only if the landowner were its improver. If no improvement or cultivation occurred, the justification of private property was negated.

Mill's analysis of rent derives basically from Ricardo. Rent arises from higher production costs on marginal land. With the increased use of marginal land, rent will rise. Mill was the first to call rent an "unearned advantage," and as such he urged that it be subject to tax. When land values increase due to natural causes, "he advocated a periodic revaluation of land leading to . . . a tax which would absorb the increase."¹⁷

¹³ *Principles, op. cit.*, p. 221.

¹⁴ *Ibid.*, p. 224.

¹⁵ *Ibid.*, p. 230.

¹⁶ *Ibid.*

¹⁷ McConnell, *op. cit.*, p. 225.

It is in the area of private property that Mill's views make the greatest inroads into the classical system, although the reforms suggested certainly are not major and often were later incorporated into practicing systems. He did not urge the abolition of private property either in general or in producer goods. What he did bring to public attention was the fact that the concept of private property was susceptible to change, that most past change had been socially beneficial and that, perhaps, some of the socialist objections to contemporary society might be circumvented by further modifications of a still basically private property system. Such modifications would have resulted in a reduction of the existing degree of inequality—which was not the result of private property but of collateral institutions. It was his distaste for the existing state of distribution which led to the often quoted paragraph:

If, therefore, the choice were to be made between communism with all its chances, and the present state of society with all its sufferings and injustices; if the institution of private property necessarily carried with it as a consequence, that the produce of labor should be appropriated as we now see it, almost in inverse ratio to the labor . . . if this or communism were the alternative, all the difficulties, great or small, of communism would be but as dust in the balance.¹⁸

Such a quotation most assuredly reveals great disappointment with existing social conditions, and patently suggests that communism is by far a superior state. However, to present the quote, as some do,¹⁹ as it appears above is to commit a grievous sin of omission by leaving the reader with the mistaken impression that Mill considers a system devoid of private property superior to one in which such an institution exists. This is not his belief. Mill continues, stating:

But to make the comparison applicable, we must compare communism at its best, with the regime of individual property, not as it is, but as it might be made. The principle of private property has never yet had a fair trial in any country.²⁰

Thus we see that Mill did not feel that the indictments against property were justified; on the contrary, the institution possessed untested potential.

What can be said for the systems in which private property is either wholly or substantially absent? Mill's "Chapters on Socialism", published posthumously in the rough form in which Helen Taylor (his stepdaughter) found them, give us the conclusions reached in his later years. Concerning

¹⁸ *Principles*, *op. cit.*, p. 208.

¹⁹ See Bell, p. 252, and Eric Roll, *A History of Economic Thought*, 3rd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1953), pp. 359-60.

²⁰ *Principles*, *op. cit.*, p. 208.

what he termed "the more ambitious plan which aims at taking possession of the whole land and capital of the country, and beginning at once to administer it on the public account," he seemed not only unconvinced, but quite against such a scheme. "Apart from all considerations of injustice to the present possessors, the very idea of conducting the whole industry of a country by direction from a single centre is . . . obviously chimerical."²¹

Mill has more favorable words for another kind of socialism proposed in his day, one which we would consider by our definitions a hybrid of socialism and communism. Concerning this hybrid, which he characterized by private property in consumer goods, but not producer goods, with land a possible mixture of public and private, basic production and distribution decisions would be made "by public act, performed according to the rules laid down by the community."²² The viability of such a society, on a village scale (as opposed to national) had already been demonstrated to Mill's satisfaction by the experiments of Owen and Fourier. "The question to be considered is, whether this joint management is likely to be as efficient and successful as the managements of private capital."²³ We shall address ourselves to this question shortly.

In summarizing Mill's views on private property, we can note that he never abandoned his belief in the usefulness of this institution, nor did he ever specifically advocate a radical departure, such as the removal of the right of property in the means of production. His only desire, quite consistent throughout his writings, was to make minor modifications (which he demonstrated had been the history of the private property principle) so that the institution would be more viable. In the very first edition of the *Principles*, he specifically notes that "It is not the subversion of the system of individual property that should be aimed at but the improvement of it."²⁴ Twenty-one years later (the "Chapters on Socialism" published in the *Fortnightly Review* were written in 1869, although not published until a decade later) Mill held the same basic position, urging his countrymen to re-examine the institution and to consider reasonable modifications of it for the purpose of insuring its viability.

²¹ *Fortnightly Review*, Vol. 31, 1879, p. 525.

²² *Ibid.*, p. 514.

²³ *Ibid.*, p. 515.

²⁴ J. S. Mill, *Principles of Political Economy*, Vol. I (Boston: Charles C. Little and James Brown, 1848), p. 255.

III

Mill on Economic Institutions

MILL HAD VERY LITTLE to say concerning the institution of freedom of enterprise, a subject not greatly in the forefront of public debate. It is clear, however, that he understood well the problems of allocating resources, particularly labor, if freedom of enterprise guided by economic motivation does not exist. He admits that output, once produced, can be divided equally, if society so chooses, but queries, "How could the labor? There are many kinds of work, and by what standard are they to be measured against one another? Who is to judge how much cotton spinning . . . or chimney sweeping, is equivalent to so much ploughing?"²⁵

Economic motivation as an institution is examined. It is found to be merely a customary mode of behavior, its justification being the assumption that people will tend to work harder and more diligently under this motive than under any other. Earlier definitions stated that communism is a system devoid of economic motivation—all receive the same income regardless of occupation (that income usually defined on the basis of need) so that the impetus to attempt more difficult tasks for greater pecuniary gains is absent. Under socialism, however, wage differentials would exist, although overall inequality would be moderate.

We can now return to the query Mill posed concerning the efficiency of public versus private management of industry. "This question has to be considered in a double aspect; the efficiency of the directing mind, or minds, and that of the simple workpeople."²⁶ Efficiency, according to Mill, is in part a function of motivations. "The difference between the motive powers in the economy of society under private property and communism [no wage differentials] would be greatest in the case of the directing minds."²⁷ He notes that under existing conditions good management is stimulated by the fact that such management can retain monetary gains without having to share them with all members of society. At the same time, management bears the full burden of poor decision-making, the result being that both positive and negative consequences tend to stimulate the "directing minds" to do their very best. In the absence of economic motivation, noneconomic stimuli, such as altruism, would be most significant. Which motivational system does Mill favor?

²⁵ *Ibid.*, p. 249.

²⁶ *Fortnightly Review*, 31 (1879), p. 515.

²⁷ *Ibid.*

The verdict of experience, in the imperfect degree of moral cultivation which mankind have yet reached, is that the motive of conscience and that of credit and reputation, even when they are of some strength, are . . . more to be depended on for preventing wrong, than for calling forth the fullest energies in the pursuit of ordinary occupations. In the case of most men the only inducement which has been found sufficiently constant and unflagging to overcome the ever-present influence of indolence and love of ease . . . is the prospect of bettering their own economic condition and that of their family.²⁸

With regard to the general effect of altruism as the motivating force for workers, Mill felt that if it fails to motivate them fully, it might still be somewhat the equal of economic motivation as it then operated. He notes that the general complaint concerning the "inefficiency of hired labor" is perhaps due to the fact that relatively equal wages are paid to all, regardless of the amount of individual effort put forth. But he adds that the possibility of becoming a foreman or obtaining a better paying position does exist and will evoke greater effort from more efficient workers. As for the alternative—noneconomic motivations for the workers—he conceded that under "communism the general sentiment of the community, composed of the comrades under whose eyes each person works, would be sure to be in favor of good and hard working, and unfavorable to laziness, carelessness, and waste."²⁹ Nevertheless, he clearly states that a new system is not necessary, that there are great possibilities within the existing system in regard to labor efficiency. His conclusion is most definite: "As far as concerns the motives to exertion in the general body, communism has no advantage which may not be reached under private property, while as respects the managing heads it is at a considerable disadvantage."³⁰ Notwithstanding, Mill still allowed that sometime in the future such a society might prove superior.

"These arguments . . . conclusive against communism, are not applicable to St. Simonism. . . . The St. Simonian scheme does not contemplate an equal, but an unequal division of the produce; it does not propose that all should be occupied alike, but differently, according to their vocation or capacity."³¹ Income differentials, then, Mill conceives to be most useful. The Fourierist communities, based on this same principal, were also praised

²⁸ *Ibid.*, p. 516.

²⁹ *Ibid.*, p. 518-19.

³⁰ *Ibid.*, p. 520.

³¹ *Principles, op. cit.*, Vol. I, p. 253.

in his "Chapters on Socialism." Just as practical trials would be necessary "to test the capabilities of communism, it is no less required for those other forms of socialism which recognize the difficulties of communism and contrive means to surmount them."⁸² These are hardly the words of a convinced socialist, but rather those of an open-minded scholar seeking workable solutions.

At this juncture it is safe to conclude that of the various alternatives to capitalism suggested, Mill was most receptive to what we would call socialism on a village basis. He was utterly opposed both to management of a national economy by a central authority and to the complete removal of economic motivation. He maintained, however, that all alternatives must be judged impartially and tested, and that the introduction of re-constructed societies on a village basis had the great advantage of permitting gradual experimentation. They could be extended if successful. Such organization might ultimately encompass an entire nation by a multiplication of the village communities, thereby allowing individuals the opportunity for choice among villages. He did, however, foresee some difficulties in the interrelations among the various communities.

It should be stressed that Mill never urged that the existing framework be replaced by the one just described. Rather, he constantly strove for betterment within the existing system. However, in judging the various possibilities put forth, he did more or less rate them as to their feasibility. The fact that he believed some were more feasible than others does not indicate a lack of faith in the capabilities of capitalism, but simply a judgment among possible alternatives.

Mill did suggest the creation of cooperative stores for those consumers who felt that under the existing system the markup paid to the distributors was excessive. While such cooperatives had encountered many problems, he stated that their contemporary success and growth indicates what could be done. In effect, a body of consumers would become competitors of the usual distributive channels. Such cooperatives would not destroy the capitalist system, but operate within it.

So far, therefore, as this class of evils is concerned [excessive marketing costs], an effectual remedy is already in operation [cooperatives], which, though suggested by and partly grounded on socialistic principles, is consistent with the existing constitution of property.⁸³

⁸² *Fortnightly Review*, 31 (1879), p. 523.

⁸³ *Ibid.*, p. 378.

IV

Mill on Free Competition

AS ARGUED ABOVE, Mill wished to retain the existing system without recourse to the social reconstruction so frequently advocated by the socialists and other reformers of his day. Yet at the same time he was receptive to all that he considered reasonable and useful in their criticisms. It was this receptiveness which has in large measure been responsible for the label 'socialist' that is sometimes attached to his name. However, neither sympathies nor limited agreement with a particular cause can validly mark one a devotee. Not everyone who can see positive benefits in socialism is a socialist and the same may be said for any other "ism."

Another institution examined is that of the market mechanism. Prices under capitalism provide a guide to both consumer and producer decisions. This institution was not the subject of very great controversy in Mill's day. Under any form of communism or socialism, a price system (if it existed) would not guide productive decisions, although it might be significant for consumer and occupational choice. Mill devoted little discussion to the comparative merits of this institution under alternative systems, although it is evident that he admired the automatic adjustments which the market (in conjunction with economic motivation) provided and the signals it gave. In the *Principles* we find:

If one kind of work is harder or more disagreeable than another, or requires a longer practice, it is better paid . . . an individual generally finds that he can earn most by doing the thing which he is fittest for. I admit that this self-adjusting machinery does not touch some of the grossest of the existing inequalities of remuneration. . . . But as popular instruction advances . . . every increase of prudence and foresight among the people encroaches upon it more and more.⁸⁴

Here again Mill's respect for the system and his optimism concerning its viability is expressed.

The institution of competition was a more significant issue. It was one of the two "great evils" of capitalism, according to the critics. Competition among laborers was said to result in low wages, while among producers it caused ruin and bankruptcy. The only groups which it benefited were landowners, capitalists, and similar elites. Mill quotes extensively from Considerant, Owen, and Louis Blanc—those in the forefront of social protest against competition—to show the unanimity of their dissent. But he is totally dissatisfied with their analysis, writing:

It must be observed that socialists generally, and even the most enlightened of them, have a very imperfect and one-sided notion of the

⁸⁴ *Principles, op. cit.*, Vol. I, p. 249.

operation of competition. . . . They forget that competition is a cause of high prices and values as well as of low; that the buyers of labor and of commodities compete with one another as well as the sellers; and that if it is competition which keeps the prices of labor and commodities as low as they are, it is competition which prevents them from falling still lower.³⁵

The critics, Mill claims, have been guilty of prejudiced analysis and sloppy pedantry. "In truth, when competition is perfectly free on both sides, its tendency is not specially either to raise or to lower the price of articles, but to equalize."³⁶ The ultimate pressure leads to a situation (imperfectly attained) which the socialists themselves would consider desirable. Furthermore, if competition does keep wages low, then it also contributes to lower selling prices for wage goods.

Mill notes that Louis Blanc had anticipated this latter defense of capitalist institutions and stated that the low prices of wage goods are an illusion, for when competition destroys all but the strongest of competing sellers, as it surely does, a very high price will soon prevail. Mill's rebuttal wholly dismisses this charge.

The commonest experience shows that this state of things, under really free competition, is, wholly imaginary. The richest competitor neither does nor can get rid of all his rivals, and establish himself in exclusive possession of the market; and it is not the fact that any important branch of industry or commerce formerly divided among many has become, or shows any tendency to become, the monopoly of a few.³⁷

Although Mill finds competition a worthy and useful institution, he is not blind to the possibilities of cooperation. He encouraged wholesaling cooperatives and felt that with education the working classes might one day make great use of producer cooperatives as well. Such devices, however, would fan the fires of competition rather than extinguish them since cooperatives must compete with one another for members and against the individual merchants on the basis of relative prices.

V

Mill on Capitalism's Defects

THESE, THEN, ARE MILL'S VIEWS on the basic institutions of a capitalist society, as well as on the possibilities which alternative systems offer. Concerning the more general criticisms by advocates of a reconstructed society,

³⁵ *Fortnightly Review*, 31 (1879), p. 375.

³⁶ *Ibid.*

³⁷ *Ibid.*, p. 376.

he considers two as foremost: great poverty and human misconduct. Mill is very sympathetic on both these counts, although he flatly rejects the contention that wages of ordinary labor have tended to decrease. Poverty is not increasing and such an "assertion is in opposition to all accurate information, and to many notorious facts."³⁸ On the contrary, "There is much evidence of improvement, and none, that is at all trustworthy, of deterioration, in the mode of living of the laboring population of the countries of Europe."³⁹ He notes that the socialists have generally formed a mistaken impression of the "proportions in which the produce of the country is really shared and the amount of what is actually diverted from those who produce it, to enrich other persons."⁴⁰ This analysis indicates that Mill was not greatly convinced by the various exploitation theories popular at that time.

Despite his opposition to the socialists' contentions, he shared their antipathy toward the poverty and moral vice of his time. Of the nature and origin of poverty, Mill had very definite opinions. It results from the "niggardliness of nature" combined with pressures toward over-population. His classic statement, espousing a theory which he never abandoned, reads simply: "The niggardliness of nature, not the injustice of society, is the cause of the penalty attached to over-population."⁴¹ The Malthusian underpinnings of Mill's economic perspectives are important in arriving at his views on alternative systems. One writer on Mill states: Not in political institutions, not in the capitalist system, not in competition, not in private capital or private property—in none of these things lay the really formidable foe. Not in them, but in the niggardliness of Nature wedded to the improvidence of Man.⁴²

The mere substitution of one set of institutions for another—social reconstruction—would not prove a panacea, for all systems would face this problem. Mill considers it a moot question as to just which system could best grapple with the pressure of population on subsistence. "On this question," he wrote, "there is much to be said for socialism. . . . But it has no just claim to be considered as the sole means of preventing . . . the peculiar tendency of poverty to produce overpopulation."⁴³

³⁸ *Ibid.*, p. 373.

³⁹ *Ibid.*, p. 374.

⁴⁰ *Ibid.*, p. 379.

⁴¹ *Principles, op. cit.*, Vol. I, p. 230.

⁴² J. MacCunn, *Six Radical Thinkers* (New York: Russell & Russell, Inc., 1964), pp. 47-48.

⁴³ *Fortnightly Review*, 31 (1879), p. 375.

The hue and cry of reformers was for the abolition and replacement of existing institutions. Although Mill may be considered a reformer, he was a reformer within the status quo, not seeking to replace the existing system, but to improve it. One reason for his lack of faith in new social arrangements was his basic faith in men rather than institutions.

There have been reformers who believed that good institutions may do much to atone for imperfect men. But Mill is not of them. His trust is not in institutions, but in men. If the working classes are to have a future, it will be by the prudence of individual working men.⁴⁴

This reliance upon people rather than institutions left Mill with few hopes concerning the institutional re-arrangements proposed. In general, he was favorably disposed to change, viewing it with interest and an open mind. Even more, he encouraged almost all new undertakings by attempting to remove from the public any hostile biases toward fair experiments. It is for this reason too—his defense of radical opinions and his pleas for their fair trial—that he is credited with “socialist leanings.” Without a doubt, however, Mill encouraged many experiments for which he had little hope of success. A chapter in Pankhurst’s book⁴⁵ is very appropriately entitled, “The Wooing of John Stuart Mill.” Mill’s correspondence with several leading socialists on the continent is examined. Their extreme efforts to convert him to their creed—in which they fervently believed—evoked his admiration. After expressing many doubts, Mill eventually gives them encouragement in their efforts. However, the feasibility of their schemes still seemed to him very distant.

In his concluding paragraph concerning the “Socialist Objections to the Present Order”, Mill summarized his feelings on their allegations:

The present system is not, as many socialists believe, hurrying us into a state of general indigence and slavery from which only socialism can save us. The evils and injustices suffered under the present system are great, but they are not increasing; on the contrary, the general tendency is towards their slow diminution. . . . There is not any one abuse or injustice now prevailing in society by merely abolishing which the human race would pass out of suffering into happiness.⁴⁶

VI

Laissez-Faire

LASTLY, LET US LOOK at Mills attitude toward government Although he

⁴⁴ MacCunn, *op. cit.*, p. 44.

⁴⁵ R. K. Pankhurst, *The Saint Simonians, Mill, and Carlyle* (London: Sidgwick & Jackson, n.d.), p. 150.

⁴⁶ *Fortnightly Review*, 31 (1879), p. 382.

did depart from the classical tradition by his abandonment of doctrinaire laissez-faire, Mill still advocated laissez-faire as a general guiding principle. It was, however, a principle subject to many exceptions based upon the common welfare. The author of *On Liberty* found it difficult, as a matter of practical affairs, to accept the restricted role of government set forth in that great essay. He feared that the government which maintained a strictly "hands-off" policy might accomplish precious little. If reforms were to be brought about in order to make capitalism more viable, doctrinaire laissez-faire had to be discarded.

Eric Roll writes that "Although he [Mill] never abandoned . . . a general belief in the superiority of competitive capitalism over other economic systems, he was . . . prepared to consider and advocate reforms . . . even if these involved government interference with private interests."⁴⁷ We may, then, consider Mill an advocate of a modified laissez-faire system since he tended to look askance at government action, demanding the fullest of justifications for any and all departures,⁴⁸ yet at the same time he was not doctrinaire in the sense of the earlier classical economists.

Mill is somewhat inconsistent here, maintaining that government should generally follow a laissez-faire policy, but not always. He gives no hard and fast rules concerning the exceptions he would allow, although he does enumerate several. Education was one area in which deviation from the laissez-faire principle could validly be made. He held great hopes for the possible accomplishments of a society in which the bulk of its citizens were educated and well informed. One problem Mill notes is that "those who most need to be made wiser and better, usually desire it least. . . ."⁴⁹ He continues:

It is therefore an allowable exercise of the powers of government, to impose on parents the legal obligation of giving elementary instruction to children. This, however, cannot fairly be done, without taking measures to insure that such instruction shall always be accessible to them, either gratuitously or at a trifling expense.⁵⁰

Mill also granted government the right to regulate child labor and suggested in clear terms what we consider today as public utility regulation. He also acknowledged the duty of the State to provide aid to those

⁴⁷ Roll, *op. cit.*, p. 355.

⁴⁸ In the *Principles*, *op. cit.* (Vol. I, p. 524), we find: "Laissez-faire, in short, should be the general practice; every departure from it, unless required by some great good, is a certain evil."

⁴⁹ *Ibid.*, p. 528.

⁵⁰ *Ibid.*, p. 530.

citizens who find themselves destitute. In short, he suggested these and a host of other exceptions which today are commonly recognized as among the legitimate functions of government in economic systems still regarded as basically capitalistic. Other exceptions which might be necessary include government provision of roads, harbors, canals, and other social overhead projects.

In a similar vein, Mill recognized the possible discrepancy between private and social costs (or revenues) and the nature of public goods. He gives an example of a geographical or scientific exploration in which "the information sought may be of great public value, yet no individual would derive any benefit from it which would repay the expense."⁵¹ He also mentions today's popular textbook example—the lighthouse—to illustrate his point. For all of these Mill finds valid reasons for expecting government to act.

At the same time, however, Mill was not unaware of the possible problems to be encountered in these activities. With regard to the controversial question of public assistance, we find him over 100 years ago making a statement on one of today's crucial problems, namely, "how to give the greatest amount of needful help, with the smallest encouragement to undue reliance on it."⁵²

The reader is left with little doubt, if he reads Mill closely, that all of the above instances are clearly exceptions rather than the rule. Mill stresses that government aid should be such that it will encourage and nurture private initiative, including the voluntary cooperative efforts of individuals to attain certain goals. Aid should be extended only on the basis of its subsequent speedy removal when the situation will allow such a retrenchment.

Mill also advocated taxation of inheritances and stressed the ability-to-pay principle of taxation. Both these suggestions have been incorporated in large measure in almost all Western societies.

We see, then, that Mill's position is the one generally accepted in the United States today—laissez-faire with reasonable exceptions. Of course, neither he nor anyone can provide a clear-cut rule applicable in all instances to determine just what constitutes a "reasonable exception." Laissez-faire and its exceptions may be variously, sometimes strangely, interpreted. There are cases in which his reasoning is obscure. In fact, a close examination reveals several inconsistencies. Nevertheless, his gen-

⁵¹ *Ibid.*, p. 556.

⁵² *Ibid.*, p. 546.

eral principles are clear. Eric Roll has neatly summarized Mill's position on laissez-faire, stating that the "theoretical vacillations show his search for a theory which would enable him to keep the *laissez faire* principle and make just those exceptions which he himself regarded as desirable."⁵³

VII

Perception and Influence

MILL ANTICIPATED WITH REMARKABLE CLARITY many of today's reforms and tendencies. Certainly his flexible attitude on laissez-faire, his stress on universal education, factory legislation, and other previously discussed measures are accepted today without much reservation. His perception can be seen in many other areas, one of which was his attitude toward the early experiments in industrial partnerships, which today we call profit-sharing. He was optimistic concerning the results which might be expected, suggesting

the admission of the whole body of laborers to a participation in the profits, by distributing among all who share in the work, in the form of a percentage of their earnings, the whole or a fixed portion of the gains after a certain remuneration has been allowed to the capitalist.⁵⁴

The popularity of this suggestion is becoming increasingly evident and stands as clear evidence of Mill's perception of ways in which capitalism may more equitably share its blessings without recourse to radical institutional changes.

In his "Chapters on Socialism" Mill notes that the removal of economic incentives, or their greatly reduced role, would probably result in a situation unfavorable to innovation and change.⁵⁵ Certainly this conclusion of a century ago is applicable to today's practicing economies of the Soviet bloc (excepting, of course, in defense, aero-space, and related industries).

He also predicted highly unfavorable results if collectivization were forced by political revolution upon "unprepared populations."⁵⁶ Again, Soviet and bloc experiences with collectivization indicate Mill's crystal ball was particularly clear on these points. Along this same line of thinking, Mill also feared the possible suppression of individualism in communist communities. Although he did not specifically levy this charge against communism, his fear of the suppression of individuality by its opponents,

⁵³ Roll, *op. cit.*, p. 359.

⁵⁴ *Fortnightly Review*, 31 (1879), p. 519.

⁵⁵ *Ibid.*, p. 518.

⁵⁶ *Ibid.*, p. 523.

present. Of course, it must be admitted that his fear extended to all modern societies.

When inquiring into the nature of distribution, Mill wrote:

The laws and conditions of the production of wealth partake of the character of physical truths. There is nothing optional or arbitrary in them. . . . It is not so with the Distribution of Wealth. That is a matter of human institution solely. The things once there, mankind, individually or collectively, can do with them as they like.⁵⁷

This reasoning later appeared as one of the essential features in Barone's refutation of the alleged theoretical impossibility of rational socialism.⁵⁸

It is difficult to measure the impact which Mill had upon the reform movements of his time and afterwards. But there can be little doubt that his encouragement of reforms and his humanitarian outlook—a break with the dogmatism of the classical tradition—were quite significant. The classical tradition culminated, and, perhaps, reached its greatest height in his writings. At the same time, however, he was the first truly significant figure to temper classicism by compromises with existing conditions. On this subject Roll writes:

Mill left an extremely valuable legacy in his consistent attempt to combine analysis with policy conclusions: indeed, to make the former subservient instruments of the latter. To this day, this has remained the outstanding feature of economic thought in the English-speaking countries.⁵⁹

Despite the fact that Mill did not fully comprehend the nature and significance of the reform movements on the continent, he did those movements a great service by the open-minded attitude and serious approach which he took toward change. Sidney Webb holds that English socialism owes almost its entire existence to Mill.⁶⁰ The Fabian stress on education, gradual change via democratic processes, and the Labor Party's efforts to give just compensation to the former owners of nationalized industries are but a few examples of Millian concepts adopted by the British government and people.⁶¹ Margaret Cole notes that George

⁵⁷ *Principles*, Vol. I, pp. 241–42.

⁵⁸ See E. Barone, "Il Ministro della Produzione nello Stato Collettivista," *Giornale degli Economisti*, 1908. English Translation appears in F. A. Hayek, ed. *Collectivist Economic Planning* (London: G. Routledge & Co., 1935), 111–11.

⁵⁹ *Principles*, Vol. I, pp. 241–42.

⁶⁰ *Fabian Tracts*, No. 15, p. 11.

⁶¹ Another Millian legacy—taxation of the "unearned advantage"—was adopted in conjunction with the Town and Country Planning Act (1947). However, the resulting taxation on land-value increments discouraged property development and was abandoned in 1953.

Bernard Shaw, prior to his membership in the Fabian Society, was a member of a discussion group devoted to studying Mill's works.⁶²

Perhaps, however, Mill's greatest legacy is the open-mindedness and rationality (as opposed to emotionalism and dogmatism) with which he approached reform and the relative merits of alternative systems. "The discussion," he wrote, "must go down to the very first principles of existing society"⁶³ And this examination should be made without any hostile prejudice."⁶⁴ Finally, "What is incumbent on us in a calm comparison between . . . different systems of society, with a view of determining which of them afford the greatest resources for overcoming the inevitable difficulties of life."⁶⁵

In summary, John Stuart Mill was a man of perception open to new ideas. He was receptive to change and urged an attack on the ills of his day. As a reformer, however, he was most interested in working within the established framework rather than abandoning it. He was, in short, no more a socialist than Professor Samuelson, whose words in the first edition of his principles text echo Mill's sentiments: "It is the present writer's belief . . . that all these evils can be ameliorated by appropriate policies, within the framework of the capitalist system."⁶⁶

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⁶² M. Cole, *The Story of Fabian Socialism* (New York: John Wiley & Sons, Science edition, 1964), p. 7.

⁶³ *Fortnightly Review* 31 (1879), p. 219.

⁶⁴ *Ibid.*, p. 220.

⁶⁵ *Ibid.*, p. 382.

⁶⁶ P. A. Samuelson, *Economics* (New York: McGraw-Hill, 1948), p. 604.

World Aid for Children

A LARGE PART of UNICEF aid is given in the form of equipment and supplies. UNICEF has helped to equip over 14,500 educational and vocational training institutions; some 10,000 welfare institutions; 45,000 health centers; and over 8,000 nutrition institutions. UNICEF provides such supplies as textbooks, audio-visual teaching aids, agricultural tools, medicines, and hospital equipment.

Tax-Induced Slow Turnover of Capital, V

By MASON GAFFNEY

VI

Summary

TO SUMMARIZE the entire paper, we find that excise and income taxation in their present forms tend to bias investors to longevity. We divide assets into four classes: appreciating, constant-valued, depreciating, and land. We find a bias to longevity within each class. Among classes, we find a bias for appreciating assets and land.

As a general policy we recommend that the income tax be modified so as to tax appreciation and deduct depreciation at the times when they accrue. We note that this modification makes the income tax, insofar as it falls on property income, much like the property tax. We note that the neutrality is impaired by shifting; and the only part of the income tax that may be made perfectly neutral is the part that falls on land income.

Our definition of income, if correct, opens a fascinating legal point. If the income tax, properly construed, is a property tax, then the 16th Amendment may authorize Congress to tax property free of the crippling rule of apportionment among states by population. The 16th Amendment authorizes taxation of "incomes from whatever source derived." The realization doctrine is not in the Amendment, but rests on the shaky case of *Eisner v. Macomber* (1920) [12]. Harold Somers has compiled several opinions suggesting the vulnerability of the doctrine. [32, 143-44]. As economics, the decision is clearly a primitive, nothing worthy of awe for its substance but only for the sheltered interests that would rally behind it.

The last 15 years may have witnessed a cyclical resurgence of the property tax, but the last 50 have seen a secular displacement of it by income and excise taxes. "Tax sharing" proposals keep nudging us along the same route. The result is a sloughing of ancient tax burdens from property to labor. To redress the balance it would help to give the income tax more of the character of a property tax.

The decision would be made by lawyers and judges. But they would solicit the professional advice of modern economists on modern economic concepts and definitions of income. What counsel would they receive?

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APPENDIX I

By William Vickrey, Matthew Gaffney, Jr.
and Joseph Holzinger*

Proof that effective after-tax rate of return rises with life of investment (point-input point-output case), when gain at maturity is subject to a tax at rate $t \in (0, 1)$.

Notation is the same as in the text, except that continuous interest is used and \underline{r} and \underline{i} are used for the continuous interest rates corresponding to the annual rates designated by \underline{r} and \underline{i} in the text. This is done simply to facilitate recognition. $i > 0$; $m > 0$.

$$e^{rm} = (1 - t)e^{im} + t \equiv f(m) \quad (1)$$

$$f'(m) = (1 - t)ie^{im} \quad (2)$$

$$rm = \ln f(m)$$

$$\frac{dr}{dm} = \frac{1}{m} \frac{f'(m)}{f(m)} - \frac{1}{m^2} \ln f(m) = \frac{1}{m^2} \left[\frac{ime^{im}}{\frac{f(m)}{1-t}} - \ln f(m) \right] \quad (3)$$

Since $\frac{1}{m^2} > 0$, it suffices to show right hand factor of (3) is positive.

$$\text{Let } u \equiv e^{im}, \text{ then } im = \ln u$$

$$\text{Let } s \equiv \frac{t}{1-t}$$

$$\text{From (1), } \frac{f(m)}{1-t} = e^{im} + \frac{t}{1-t} = u + s$$

$$\ln f(m) = \ln(1-t) + \ln(u+s) \quad (4)$$

Now the right hand factor of (3) is defined as:

$$g(u) = \frac{u \ln u}{u+s} - \ln(1-t) - \ln(u+s) \quad (5)$$

$$g(1) = 0$$

If $g'(u) > 0$ for $u=1$, then $g(u) > 0$ for $u > 1$ and, for $m > 0$.

$$g'(u) = \frac{(u+s) [\ln u + 1] - u \ln u}{(u+s)^2} - 0 - \frac{1}{u+s}$$

$$= \frac{u \ln u}{(u+s)^2} > 0 \text{ for } u > 1. \quad \text{Q.E.D.}$$

* Credits are difficult to assign. There was an earlier proof by M. Consigny, superseded by Vickrey's more direct proof. This was simplified by Matthew Gaffney, Jr., with advice from Ralph Krause. A final simplifying substitution was contributed by Joseph Holzinger, and the present proof is his.

Appendix II

By William Vickrey and Michele Consigny*

Proof that an income tax using true depreciation is intertemporally neutral.

Let $A(x)$ be a (continuous) cash or service stream bought for $C(0)$, 0 being the time of purchase and x the time of payment, m being the date of maturity or final payment. Let $P(x)$ be the present value at time 0 of a payment of \$1 at time x . The instantaneous short term rate of interest at time x is then $h(x) = -\frac{1}{P} \frac{dP}{dx}$. (The annual rate of interest is $i = e^h - 1$.) $C(y)$, the value at time y of the remaining payments from y to m , is then given by $P(y) \cdot C(y) = \int_y^m P(x) \cdot A(x) dx$. (1)

The depreciation in capital value at time y is then obtained from (1) by differentiating with respect to y :

$$P \frac{dC}{dy} + C \frac{dP}{dy} = -P(y) \cdot A(y), \text{ and by solving for the depreciation, } \frac{dC}{dy} \text{ we get } D(y) = -\frac{dC}{dy} = A(y) + \frac{C}{P} \frac{dP}{dy} = A - hC \quad (2)$$

Now let a tax be imposed at a rate $t(y)$ on the net income after depreciation $Y = A - D$, so that the tax is $t(y) [A(y) - D(y)]$ and the net receipts after tax are then $\Pi = A - t(A-D) = A - thC$. Then there exists a private (2a) discount function $R(y)$, such that for any asset with a stream of payments $A(y)$, the current value of the asset can be obtained equally from discounting the gross payments A with the public discount function P , or the net proceeds Π

* Again, credit is hard to allocate precisely. Miss Consigny first formulated the problem and proved the theorem. Professor Vickrey greatly shortened and generalized the proof and brought it to its present form. A third proof by Matthew P. Gaffney, Jr., might equally well have been presented.

with the private discount function R : $\int_0^m PA \, dy = \int_0^m RN \, dy$.

The private discount function R will be related to P and t by the equation

$$-\frac{1}{R} \frac{dR}{dy} = r = h(1-t) = -(1-t) \frac{1}{P} \frac{dP}{dy} \quad (3)$$

where P , R , t , and h are all functions of y , h being the public rate of discount and r being the private rate of discount. $P(0) = R(0) = 1$.

$$\begin{aligned} \text{We have } & \int_0^m R(y) N(y) \, dy \\ &= \int_0^m R(y) [A(y) - t(y) h(y) C(y)] \, dy \quad [\text{using (2a)}] \end{aligned} \quad (4)$$

$$\begin{aligned} &= \int_0^m R(y) [A(y) - t(y) h(y) \int_y^m \frac{P(x)}{P(y)} A(x) \, dx] \, dy, \quad (5) \\ &[\text{using (1)}] \end{aligned}$$

$$\begin{aligned} &= \int_0^m R(y) A(y) \, dy - \int_{y=0}^m \int_{x=y}^m \frac{t(y) h(y) R(y)}{P(y)} \\ &P(x) A(x) \, dx \, dy \end{aligned} \quad (6)$$

which becomes, by inverting the order of integration

$$\begin{aligned} &= \int_0^m R(y) A(y) \, dy - \int_{x=0}^m \int_{y=0}^x \frac{t(y) h(y) R(y)}{P(y)} \\ &dy \, P(x) A(x) \, dx. \end{aligned} \quad (7)$$

$$\text{From (3), we have } ht = \frac{1}{R} \frac{dR}{dy} + h = \frac{1}{R} \frac{dR}{dy} - \frac{1}{P} \frac{dP}{dy} \quad (8)$$

$$\text{so that } \frac{t(y) h(y) R(y)}{P(y)} \, dy = \frac{1}{P} \, dR - \frac{R}{P^2} \, dP = d\left(\frac{R}{P}\right), \text{ so} \quad (9)$$

that (7) becomes

$$\begin{aligned} \int_0^m R(y) A(y) \, dy &= \int_0^m \left[\frac{R(y)}{P(y)} \right] \bigg|_{y=0}^x P(y) A(x) \, dx \quad (10) \\ &= \int_0^m R(x) A(x) \, dx - \int_0^m \left[\frac{R(x)}{P(x)} - 1 \right] P(x) A(x) \, dx \\ &= \int_0^m [R(x) A(x) - R(x) A(x) + P(x) A(x)] \, dx \\ &= \int_0^m P(x) A(x) \, dx = C(0). \end{aligned}$$

⁵³ *Errata*: In "Tax-Induced Slow Turnover of Capital, II," p. 181, n. 14, the equation should read:

$$m = \frac{\ln(1-t)}{\ln \left[\frac{1+i(1-t)}{1+i} \right]}$$

On p. 187, line 18, for [shifting] "would push i up to a new level, i " read "would push i up to a new level, i ." And read in line 31 "... the premium of short i over long i ..." And read p. 188, line 15 "... the fact that i ..." And read p. 195, line 29 "Capital must now earn i ..." And on p. 196 read line 6 "... to earn i before taxes." And read line 7 "at the higher rate of interest, i ..." And in *ibid.*, III, on p. 283, line 8, read $a(1+i)^{-1}$ as $a(1+i)^{-1}$.

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The Quality of Existence on Welfare

The Diary of A. N.: The Story of the House on West 104th Street.
By Julius Horwitz. New York: Coward-McCann, Inc., 1970, 220 pp., \$5.95.

JULIUS HORWITZ SPENT eight years as a welfare caseworker and as consultant to the majority leader of the New York State Senate on problems of social welfare. Out of his intimate knowledge of the life experiences of welfare clients, out of his experience with the working and malfunctioning of the welfare system, and out of piles of case notes and records of interviews with hundreds of children, black and white, second or third generation wards of the system, he has written this sociological novel which deserves a place beside the works of Victor Hugo and Upton Sinclair.

The book, presented as the diary of a 15-year-old black girl setting down her experiences and observations, is a savage attack on a welfare system which, instead of providing equal opportunity, offers its beneficiaries just enough of a dole to keep them alive in a life style of continuing degradation. The book lets the facts of life on Manhattan's upper West Side make their own argument. This contributes to its powerful impact.

At the end A. N. gets caught up in one of the anti-poverty programs intended to break the cycle of dependency. Will she make it? The social scientist-turned-novelist so successfully involves the reader by the details of the story teller that the reader hopes so.

Julius Horwitz's previous book, *The W.A.S.P.*, was pronounced "the best American novel published in England in 1968." Surely the present one will win accolades, not only from general readers but from social

scientists pleased by the use of their research techniques to get an understanding of a life style as a basis for its artistic representation. This is a solid, revealing work, but it is also a fascinating one, offering to those outside the slum ghetto an accurate picture of the life that goes on there.

WILL LISSNER

New York

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EDITED BY DANIEL M. HOLLAND

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Social Learning and Economic Behavior:

The Process of Economic Socialization

By ROBERT B. DENHARDT *and* PHILIP W. JEFFRESS

I

Introduction

IN A LECTURE before the American Economic Association in December, 1965, Kenneth E. Boulding addressed his remarks to the broad role of knowledge in social systems.¹ Questioning the discipline of economics for its relative lack of attention to the manner in which persons become knowledgeable as to the economic consequences of their behavior, the noted theorist implied that well-directed inquiry into the relation of social learning and economic behavior could add a new and worthwhile dimension to the current paradigm of economic analysis.

During the same period in which these remarks were made, scholars in several other disciplines were being forced to similar conclusions. Sociologists, social psychologists, anthropologists, and political scientists were registering substantial gain in their understanding of the human learning process as related to their respective areas of interest. However, perhaps simply because of questionable but accepted disciplinary boundaries, these ~~same people were questioning the role of learning in~~ the learning of specifically economic operations.

These comments suggest a serious gap in the study of socialization, for

¹ Kenneth E. Boulding, "The Economics of Knowledge and the Knowledge of Economics," *American Economic Review, Papers and Proceedings*, 56 (May, 1966), pp. 1-13. See also Boulding, *The Image* (Ann Arbor: University of Michigan, 1961), esp. pp. 82-96.

much may be gained by analysis of the human learning process as it relates to economic functions and behaviors. If in fact economic activity may be considered in one sense as a social process directed in part by the acquired beliefs of its participants, then study of the inculcation of orientations toward such behavior would seem a valuable adjunct to the traditional foci of economics. And if, on the other hand, the economic orientations of society's members impinge on their other socially directed beliefs and values (certainly a likely hypothesis), then inquiry in this area would also seem helpful to several other social sciences.

What seems demanded, therefore, is an interdisciplinary focus by which the study of economic learning might benefit from similar studies in other areas and, in turn, might contribute to them. In the pages which follow, such an approach will be outlined in general terms, the intention being primarily to establish certain guidelines for research in economic socialization and to suggest the advisability of undertaking such work.

In order to establish a framework of terminology for the discussion of the socialization process as related to economic behavior, we may first note that essential to nearly all previous studies of social learning is the concept of *social role*.² From the perspective of contemporary sociology, for example, the individual is conceived as acting in terms of various roles, each comprised of the beliefs of the actor and the expectations of others concerning the proper behavioral content of the particular role.³

In this paper our concentration will be on one fairly broad, yet rather standard role in which the normal individual in modern society may be expected to become involved. In addition, we will later touch upon a number of subsidiary roles related to and generated by this more general classification. For the present, however, it is necessary only to consider the more comprehensive of these roles, the general economic role. For the purposes of this study, this role will be interpreted as any social role defining for the actor his participation in the social process of allocation and exchange normally referred to as economic activity.⁴ We shall, there-

² There are of course many current explanations of this concept. For example, see Mervin N. Farnham, Merton F. Ward, and Alexander W. McLachlan, *Explorations in Role Analysis* (New York: John Wiley and Sons, 1948); Michael I. Danneberg, *Role Theory* (New York: Basic Books, Inc., 1965); Bruce J. Biddle and Edwin G. Thomas (eds.), *Role Theory: Concepts and Research* (New York: John Wiley and Sons, Inc., 1966).

³ Talcott Parsons and Edward A. Shils (eds.), *Toward A General Theory of Action* (Cambridge: Harvard University Press, 1951), pp. 19-20, 23-26.

⁴ While this formulation may suggest only the most distant empirical referents, its congruence with accepted notions of economic behavior justifies its usage.

fore, be concerned with roles and patterns of behavior distinguished by their association with the more generalized economic system and through their interaction with other economic roles.

As we have mentioned, an economic role, like any other social role, is by definition socially determined. It is completely operative only in reference to the expectations of others. Sketching this proposition on a broader scale, the accepted value-orientations of the members of a social system must be transmitted to the incoming members of the system to allow them to formulate socially "proper" conceptions of their functional roles in the system. The learning process by which this transmission of values takes place is normally called "socialization."⁵

As in other social realms, there are certain norms and values notably related to the process of resource allocation in society. To use a rather basic example we may turn to the area of child development. It is apparent that, in order for the child to engage in even the most simple of economic tasks, he must attain a minimum level of understanding concerning economic operations. This awareness, while obviously not innate in the child's personality, may be gained through his interaction with other persons such as his parents or his teachers. In much the same way, complex economic functions may be transmitted through society, enabling individuals to operate in an acceptable manner in terms of their economic behavior. It is, therefore, in this quite basic sense, that the process of socialization has bearing on economic conduct.

II

Subjects and Agents of Socialization

EVEN THE MOST CURSORY EXAMINATION of the current literature on social learning indicates that the delicate process by which learning takes place is a highly complicated and often misunderstood area. So, rather than becoming entwined in the intricacies of contemporary theories of personality, we shall confine this discussion to certain broad topics of particular relevance to the study of economic socialization.⁶

⁵ Stated broadly, socialization is "the process by which individuals selectively acquire skills, knowledge, attitudes, values, and motives current in groups of which they are or will become members." See William H. Sewell, "Some Recent Developments in Socialization Theory and Research," *Annals of the American Academy of Political and Social Science*, 349 (September, 1963), p. 163. Studies of socialization in other areas have produced an abundant body of literature. See Sewell, *op. cit.*; Irwin L. Child, "Socialization," in Gardner Lindzey (ed.), *Handbook of Social Psychology* (Cambridge: Addison-Wesley, 1954), pp. 655-92.

⁶ For a survey of personality and learning theories, see Calvin S. Hall and Gardner Lindzey, *Theories of Personality* (New York: John Wiley and Sons, Inc., 1957). See also

First, economic learning, like other modes of socialization, is conditioned by the interplay of those being socialized and the sources of socialization. The former group we shall designate "subjects"; the latter we shall call the "agents of socialization." Since the characteristics of each of these groups bear directly on the nature of the learning process, it is important that they be well understood.

Learning is significantly influenced by the social and psychological disposition of the subjects of socialization. As an example, by constraining the capabilities of the person to assimilate new social concepts into meaningful standards of behavior, such psychological factors as the subject's receptivity to learning or his selective perceptions may prove extremely important. Since the operation of such forces may be assumed to remain fairly consistent regardless of the substance of socialization (at least between such areas as economic learning or political learning), little may be gained by their further examination in the present context. The vitality of such factors does suggest, however, the advisability of specifying rather precisely the subjects of economic socialization with respect to these questions. In addition, numerous environmental features of the learning situation itself may affect the process of socialization. Variables ranging from the subject's age to the particular subculture of which he is a member demand attention in socialization studies.⁷

Socialization studies in other fields, particularly that of political science, have placed great emphasis on the various agents of learning. Since it is through these persons or groups that societal values are transmitted, the agents of socialization exercise significant influence over the content and degree of learning, factors in turn important in the structuring of role behavior. Additionally, we should note the possibility that groups may compete as agents of socialization and that the salience of various agents proves a determinant of economic socialization. It is important therefore that the study of economic learning determine which agents are most influential in economic learning.

From among the many groups which might conceivably act as agents of economic socialization, we may cite as illustrative several groups hypothetically most active in the conveyance of economic standards of behavior. These are the family, the educational system, other social (and primarily economic) institutions, and the mass media.

Erik H. Erikson, *Childhood and Society* (New York: W. W. Norton & Co., Inc., 1950); John W. M. Whiting and Irwin L. Child, *Child Training and Personality* (New Haven: Yale University Press, 1953); Orville G. Brim, Jr. and Stanton Wheeler, *Socialization After Childhood: Two Essays* (New York: John Wiley and Sons, Inc., 1966).

⁷ See note 5 above.

The family—For most persons, and particularly for children, the family would be expected to act as a central agent, if not the foremost agent of economic socialization.⁸ It is largely from the child's interaction in a family situation that he gains his first basic insight into the nature of economic behavior. Through various means he is taught to fulfill his basic roles in an economic situation. As an agent of economic socialization, the family may be said to operate at two levels: it may transmit economic standards directly (through intentional instruction) or indirectly (as through imitative behavior on the part of the child).

As an example, it is certainly not inappropriate in this respect to point to the notions of sharing or trading which are so early taught to the child. Upon such minimal foundations as these the family is able to convey more complex economic role behavior to the learning child. By assuming a part in the chores of the family he is taught the basis of his role as a producer. On the other hand, through the purchase of small items, he enters another role, that of the consumer. Admittedly, these crude illustrations depict only the most basic economic participation of the child. However, such experiences may prove a vital step in the process of economic socialization. For permeating these economic operations are certain motives and standards of evaluation, normally instilled by the family in the child, which may eventually guide his economic behavior in later life.⁹

The educational system—While the family acts frequently in an indirect manner as an agent of socialization, the educational system is most significant for its intention to develop economic understanding. Speaking generally, the child's teachers are primarily concerned with the child's knowledge of economic situations and the tools of economic behavior, rather than with the attitudes of the child toward his own participation in such behavior. However, perhaps inevitably, such influences are likely to be present. This phenomenon may be illustrated most clearly with reference to the subject's attitudes toward quite general economic systems. For example, it is obviously quite difficult to explain economic behavior under a capitalist system without instilling in the student a bias toward this mode of resource allocation. As a result the person becomes slightly

⁸ See Talcott Parsons, "Family Structure and the Socialization of the Child," in Talcott Parsons and Robert F. Bales (eds.), *Family, Socialization and Interaction Process* (Glencoe: The Free Press, 1955).

⁹ Limitations of space prevent extended analysis of the subtle complexities of the relationship described here. For example, what differences in learning might be found in father dominant, equalitarian, or mother dominant homes? A vast number of questions such as this beg empirical investigation.

aware of and receptive to certain aspects of the system, elements often brought to mind by a key word or phrase. For example, there is little doubt that most Americans respond with favor to such phrases as "the profit motive" or "the free enterprise system." On the other hand, the mention of certain other topics such as "deficit spending" or "union influence" may immediately evoke an unfavorable response.

Other institutions—Of course, many other social institutions, especially those primarily oriented toward economic functions, bear on the process of economic socialization. We shall mention two areas of special importance. First, the individual's work group is often an important agent of economic education. For example, large organizations, particularly large corporate bodies, tend to mold the production roles of a significant number of society's members.¹⁰ By their enforcement of certain work standards and of particular types of behavior, such associations perform an important socializing function relative to the economic behavior of their members. Parenthetically, it should be mentioned that corporate groups provide special economic roles for the person. That is to say, the individual acting in behalf of the organization in economic exchanges might be expected to reveal different patterns of learning and behavior than the person acting in his own behalf.

Mass media—The second major area in which large organizations, again primarily corporate bodies, participate in the socialization process is through their attempts to mold the economic habits of the public through advertising. Since the greater part of modern advertising is carried out through the mass media, we may consider the media an agent of socialization. Certainly the educational impact of advertising should not be underestimated. In speaking of modern man's inclination toward consumption, John Kenneth Galbraith has commented that, "On no other matter, religious, political or moral, is he so elaborately and skillfully and expensively instructed."¹¹ Through the media, advertising not only informs the public of various alternatives for consumption, but also attempts to instill certain economic attitudes. Through the expenditure of billions of dollars in promoting such notions as style-consciousness or "buy now—pay later," advertising becomes an intentional and usually successful attempt to direct the flow of expenditures and to "mass produce" consumer wants.¹²

¹⁰ See Robert V. Presthus, *The Organizational Society* (New York: Vintage Books, 1965), p. 12.

¹¹ John Kenneth Galbraith, *The New Industrial Society* (Boston: Houghton Mifflin Co., 1967), pp. 37–38.

¹² Alvin H. Hansen, *Economic Issues of the 1960's* (New York: McGraw-Hill Book Co., Inc., 1960), p. 76.

III

The Content of Economic Socialization

WE HAVE NOTED that the demands of social stability require that any society establish and maintain certain rules or standards of behavior for its members. It is apparent that many of these relate directly to the participation of society's members in economic activity, influencing their perceptions of economic phenomena and guiding in part their responses in economic situations. The development of orientations such as these, largely through the process of socialization, provides content and meaning to the various economic roles defined by the society. It is, therefore, the juxtaposition of the major economic roles and the orientations toward these which give rise to the study of economic socialization. In this way, one may most easily approach the question of the content of economic socialization, that is, what is learned.

Just as the range of economic experiences of man is quite broad, so are the system components toward which the individual orients his behavior quite varied. However, in order to circumvent some of the complexities in dealing either with a single broad economic role or a multitude of lesser roles, we may suggest a middle range approach. Taking a cue from traditional economic thinking, which suggests that particularly in a market economy consumption and production are central to the conduct of economic activity, we may suggest that it is the orientations of actors toward these two functions which supply the motive factor in economics as a social process. In other words, as these orientations are more completely developed and standardized, the result is the creation of two major economic roles, one related to consumption, the other related to production. As interaction between these roles occurs, the exchange system vital to resource allocation is established.

Since this schema suggests the importance of learned attitudes and behavior in modifying economic action, it is necessary to focus on the content of such learning. That which is socially transmitted relevant to economic behavior may be seen through an examination of various *group norms*; that is "the shared acceptance of rules, which are prescriptions for ways of perceiving, thinking, feeling, or acting" in an economic setting.¹³ Such learning may be illustrated through the postulation of four *norms* which are specifically toward their economic role behavior. These sets of expecta-

¹³ Theodore M. Newcomb, Ralph H. Turner and Philip E. Converse, *Social Psychology: The Study of Human Interaction* (New York: Holt, Rinehart, and Winston, Inc., 1965), p. 229.

tions, social standards of economic action, are related to the major roles of consumption and production in Table 1.¹⁴ While this summary should not be expected to indicate the totality of socialization content in the area of economic behavior, it does provide material illustrative of the types of content one might expect here. These notions will be elaborated in the following paragraphs.

The first set of expectations, *perceptual norms*, relates to judgments about what we see around us. This is primarily the area of knowledge, especially as there is knowledge in the perception of goods, positions, skills, and institutions in such a way as to suggest their application in economic conduct. Just as persons (and societies) differ as to what is valuable in an economic sense, they may also differ in their estimation of the economic applicability of certain phenomena. For example, it is quite apparent that society decides and communicates to its members which consumption alternatives are acceptable for the individual. Certain goods are simply not approved objects of consumption; that is, they are not to be perceived as items of consumption. Although a bizarre example, the exclusion of the practice of cannibalism in our society demonstrates the limiting effect of social standards on economic perceptions. At the same time that social learning acts to limit individual choice, it may also act positively by suggesting certain economic behaviors to the person. For instance, most societies today suggest standard levels of cleanliness and health, levels which point up to the person the need for minimum amounts of expenditures.

Just as society acts to instruct the individual concerning his knowledge and actions as a consumer, so does social learning enter into the person's formulations of notions toward production. For example, a Southern slave in the 19th century would hardly have been taught to perceive plantation ownership as a production possibility. In a highly similar way, certain job opportunities today are limited to non-Negroes, not only by overt discrimination, but also by more subtle socialization. There is perhaps a positive side to the way in which the individual is taught which alternatives for work are acceptable. This is perhaps most easily seen as a family restricts, through its teachings and actions, the range of production alternatives for its offspring. Some jobs, usually prestigious ones, are viewed with favor. Others are excluded from consideration.

¹⁴ The terms "perceptual," "cognitive," "evaluative," and "behavioral" are adapted from Newcomb, Turner, and Converse, *op. cit.*, pp. 230-38.

Table 1

CONTENT OF ECONOMIC LEARNING IN MAJOR ECONOMIC ROLES

	<i>Consumption Roles</i>	<i>Production Roles</i>
<i>Perceptual norm</i>	<p>Understanding of Exchange System</p> <p>Acceptable alternatives for consumption Nature of expected consumption Requisite skills for consumer behavior</p>	<p>Acceptable alternatives for production Nature of expected production Requisite skills for productive behavior</p>
<i>Cognitive norm</i>	<p>Acceptance of Exchange System</p> <p>Social values of consumption alternatives Attitudes toward institutions Beliefs about economic system</p>	<p>Social values of production alternatives Attitudes toward institutions Beliefs about economic system</p>
<i>Evaluative norm</i>	<p>Evaluation of Exchange System</p> <p>Establishment of dominant values Conditions of choice Mechanisms of selection</p>	<p>Establishment of dominant values Conditions of choice Mechanisms of selection</p>
<i>Behavioral norm</i>	<p>Implementation of Exchange System</p> <p>Nature of involvement in consumption Acceptable patterns of consumer behavior Acknowledgement of sanctions</p>	<p>Nature of involvement in production Acceptable patterns of producer behavior Acknowledgement of sanctions</p>

A second set of orientations, *cognitive norms*, refers to beliefs about various attitude objects and the attribution of certain properties to them. The perceptual knowledge which an individual acquires about his economic role is tempered and modified by the attitudes current in groups of which he is a member. Those attitudes of greatest importance for the present purposes seem to be those which pertain to 1) known alternatives, 2) economic institutions, and 3) the economic system. Certainly all men are not fully rational in their attribution of values to various objects of consumption. Among the forces bearing on this process is the social impact of groups of which the individual is a member. For example, certain goods, even though perceived as having an economic value, are not acceptable to some groups. On a society-wide basis, this may be seen in social disavowals of the use of certain drugs by persons in this country. But such social restrictions are not necessarily dichotomies of that which is acceptable and that which is not. For example, to some persons (or more properly, to members of some groups) the purchase of a large and expensive automobile would be considered an outlandish extravagance. To others it would be considered necessary and commonplace.

In much the same way, the perceptions of economic institutions, and even of the economic system itself, are colored in part by the accepted group norms of the society. Certainly the reverence with which many large corporate enterprises are viewed today is in part a product of socialization, the agent in many cases being the organization itself acting through the mass media. Likewise, certain mechanisms seem to be built into the economic system itself which serve to maintain and to reinforce the social values of the particular system. Through a variety of means economic participants are instructed, for instance, that capitalism is a more advantageous system than socialism.

A third category of expectations, *evaluative norms*, takes the process of economic understanding one step further by suggesting a common rule by which objects may be ranked according to their social value. A wide variety of social value patterns, including aesthetic values, religious values, and community values, suggest the ordering of goods according to their correspondence to that social pattern. It is here that the learning of social values bears on the formation of choices between or among competing goods and services. From the standpoint of socialization study, it is not enough to note, as does traditional economic theory, that "economic man" will attempt to maximize his total satisfactions and total utilities. The new perspective demands recognition of the fact that the inescapable

area of human tastes is in part determined, that through social learning we are instructed as to what will be considered satisfying.

A fourth area of economic orientations, *behavioral norms*, relates to behavioral patterns acceptable to the society or group. To use a most convenient example here, we might simply indicate that some groups find purchase the proper means of obtaining economic goods, while others might instruct their members to beg, borrow, barter, or even steal. Naturally, more subtle and more complex patterns of behavior may also be illustrated. A simple example is found in the shared acceptance of a given saving pattern within a particular group such as a family. Similarly, the production role is affected by group norms related to individual behavior. Many studies have indicated the effect of work group standards on the single worker's rate of production. In any case, the important point is that behavioral norms provide a cumulative area in which values, beliefs, and attitudes are transformed into standards of action.

IV

Conclusions

IN THE PRECEDING PAGES, we have outlined in brief fashion one approach to the question of social learning and economic behavior. Where possible, we have presented examples of how economic thinking and economic action may be influenced by the process of socialization. What has been done here is only a beginning. However, while the focus suggested here must be considered tentative or even experimental, it does point to new areas of analysis for students of both social and economic behavior. So, at this point, we may turn to some consideration of the possible import of such a study.

At the outset, it should be noted that the investigation of social influences on economic behavior is itself a well-established endeavor.¹⁵ Ranging from Max Weber's study of the relation of the Protestant ethic to the rise of capitalism to Thorstein Veblen's analysis of the class demands for conspicuous consumption, many studies have sought to relate aspects of economic behavior to the influence of particular social groups.¹⁶ This per-

¹⁵ The wide variety of approaches to this matter is indicated in the following selections: William E. Moore, *Economy and Society* (New York: Random House, 1955); Talbot Parsons and Paul H. Shils, *Economic Action and Social Structure* (Glencoe: The Free Press, 1956); Neil G. Smelser, *The Sociology of Economic Life* (Englewood Cliffs: Prentice-Hall, Inc., 1963); W. T. Tucker, *The Social Context of Economic Behavior* (New York: Holt, Rinehart, and Winston, Inc., 1964).

¹⁶ Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York: Charles Scribner's Sons, 1958); Thorstein Veblen, *The Theory of the Leisure Class: An Economic Study of Institutions* (New York: The Viking Press, 1945).

spective has, in one sense, been highly strengthened by recent inquiries into the psychological factors bearing on economic choice. Included here, one might cite the work of George Katona on the psychological study of economic behavior or that of David McClelland and others on the achievement motive.¹⁷ To these works and others like them, the study of economic socialization provides an added dimension, a focus on the process by which economic standards are transmitted.

Nevertheless, it is important to understand that this study does not intend to replace or dispose of the traditional uses of the firm or the household in economic theory. Machlup has pointed out that the household is not an object of study, but rather a theoretical link between cause and effect.¹⁸ If, in a particular household, a television set and a new car are purchased in preference to indoor plumbing (assuming the same cost), it is sufficient for the purpose of price theory to explain this action merely in a way which permits an expression of "preference or indifference as between any two bundles of goods and services independently of any other person's choices."¹⁹ The contribution of economic socialization is neither to render this kind of assumption obsolete nor to provide a different scheme aimed at explaining the same phenomena.

This is not to say, however, that the study of economic socialization may provide only a limited contribution to the understanding of economic action. Rather its capabilities fall in different fields. In fact, a study of the process of economic socialization has important implications in several areas. Foremost among these is the explanation of distinct or even subtle differences in economic behavior which can be viewed growing out of the involvement of persons in different social groups.

Economic attitudes and behavior of the poverty as opposed to the non-poverty group serve as a useful example. Basic attitudes toward work may be quite different for a child socialized into a family supported by welfare programs from those of a child of working parents. The array of job possibilities about which a teenager learns may be very limited in

¹⁷ *Unhappy Dollars: Life of the Unhappy Consumer Society* (New York: McGraw-Hill Book Co., 1964); George Katona, *The Powerful Consumer* (New York: McGraw-Hill Book Co., 1960); David C. McClelland et al., *The Achievement Motive* (New York: Appleton-Century-Crofts, Inc., 1953).

¹⁸ Fritz Machlup, "Theories of the Firm: Marginalist, Behavioral, Managerial," *American Economic Review*, 57 (March, 1967), p. 9.

¹⁹ Francis M. Bator, "Government and the Sovereign Consumer," in Edmund S. Phelps (ed.), *Private Wants and Public Needs* (New York: W. W. Norton and Co., Inc., 1965), p. 120.

poverty subcultures. This may be particularly important for Negroes and other minority group members who have traditionally been discriminated against in competing for certain jobs. Children of low-income families may learn to expect opportunities only in special low-income producing jobs. Therefore they may often lack the motivation to try to achieve something better. But the child is not only affected in his expectations and choices concerning his work role, but also in the consumer role. The groups into which he is socialized help to determine the goods and services which in later life may come to seem satisfying to him. The group has deemed it important for its members to purchase them. Such is the case when one finds television sets and automobiles being purchased before health and sanitation needs have been attended to.

Just as the study of socialization may provide insight into variations in economic behavior among various social groups, it also serves to clarify the development of certain areas of public policy. Alvin Hansen, in his book, *Economic Issues of the 1960's*, says:

Consumer "education" operates in two directions, each reinforcing the other. In one direction an immense effort is made to create social values which will build up a demand for gadgets and thus hold the line for the material-goods industries. In another direction an equally strong effort is made to persuade the public that government expenditures should be reduced. We are witnessing, so to speak, a contest between gadget society and a civilized society.²⁰

Surely the question for "public versus private" has implications for a multitude of issues in economic policy. By enabling this problem to be viewed as one of social education, the study of economic socialization may provide greatly strengthened insight into the formation and maintenance of economic policy.

Without question our present knowledge of the process of social learning as related to economic behavior is quite limited. For this reason, this paper has sought simply to provide a broad overview of the many questions which might be posed in this connection. Obviously, the intricacies of economic socialization still require detailed examination. At this point, however, one must be content to conclude that the study of economic socialization shows great promise, both for students of economic behavior and for students of social learning generally. Hopefully, the potential of this area of inquiry will be fulfilled through future research.

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²⁰ Hansen, *op. cit.*, pp. 77-78.

A New Financial Handbook

WHAT ARE THE MAIN USES and the main sources of the capital that feeds the economics of countries which are members of the Organisation for Economic Cooperation and Development?

What rates of interest apply in each OECD country to some 15 different financial instruments, and what is the yield on Euro-bonds?

What is the total of new security issues on domestic financial markets and the Euro-market?

How are the security portfolios of the various categories of financial institutions, the State and other classes of investors, made up?

What transactions are carried out on security markets?

These are some of the main questions answered in *OECD Financial Statistics*, the first issue of which has just appeared. This new periodical publication of the OECD gives detailed and comparable information on the financial markets of 14 European countries, the United States, Canada and Japan. It assembles information hitherto either unpublished or obtainable only with difficulty in a large number of specialized publications in various languages. The data are integrated in a system of correlated tables. The standardization of tables has been carried as far as was possible to the present stage in view of the special characteristics of the various financial markets. There are abundant explanatory notes accompanying the tables to help with their interpretation. The tables and notes together make it possible to analyse the structure of financial systems and their evolution over a long period.

OECD Financial Statistics will appear twice annually, with updating supplements published every two months. In all, over a thousand pages of information will be available each year at a cost of \$26. The publication is the responsibility of the Financial Affairs Directorate; it is the result of work carried out in the OECD with the aim of improving capital markets and filling the gaps which still exist in the preparation and publication of financial statistics. Since 1967 the Organization has published a series of studies on capital markets and their functioning, as well as on the formation and use of savings.

The following is an example of the information which can be obtained from *OECD Financial Statistics*: France and Japan come next to the United States in the annual value of share issues (\$1.5 billion each in 1969, compared to \$8.4 billion for the United States) followed by Italy (\$1.2 billion), Germany and the United Kingdom. [From OECD].

Would Government Support Be a 'Booby Trap' for Behavioral Scientists?

By E. C. HARWOOD and ROLLO HANDY

THE BOOK¹ REVIEWED HERE is by The Behavioral and Social Sciences Survey Committee, a group appointed jointly by the National Academy of Sciences and the Social Science Research Council. The number of influential persons associated with the project (see lists of names on pp. 275-79 and pp. vi-viii) suggests that the general point of view expressed in the Report is shared by many contemporary behavioral scientists, possibly a majority of them.

In the first half of the book the authors discuss the field of behavioral inquiry, briefly describe many of the relevant disciplines, review the research methods currently in use, and discuss the social import of behavioral science findings. They recommend the following: the further development, with Congressional support, of a system of social indicators analogous to the President's Council of Economic Advisers' economic indicators; the private (non-governmental) development of an annual Social Report to the nation; the formation of a commission to devise a national data system for behavioral research purposes; the establishment of a federal government group to work on ways of protecting the anonymity of the individuals studied; the creation of graduate schools of applied behavioral science; and an increase in federal support funds for basic and applied behavioral research from between 12 per cent and 18 per cent per year over the next decade.

The second half of the book contains much useful, detailed information on the following: students and degrees granted in behavioral science fields; Ph.D.-granting departments; the role of behavioral scientists in professional schools; behavioral research institutes; non-university behavioral research; federal and private support of behavioral research; and the situation in countries other than the U.S.A.. The factual data are primarily for the 1966-67 academic year; numerous projections are made for 1976-77.

¹ *The Behavioral and Social Sciences: Outlook and Needs*. By The Behavioral and Social Sciences Survey Committee. (Englewood Cliffs, N.J.: Prentice-Hall, 1969), 320 + xv pp., \$7.95.

I

MANY SECTIONS of the Report will not withstand critical inquiry. *At times* the procedures adopted in the Report are unscientific and superficial, the language used is loose, the relevant evidence is only partially mentioned, and controversial issues are slurred over. Some illustrations follow:

(1) The authors say: "The fact that social prediction will always be contingent upon subsequent events, and hence will always lack complete accuracy, means only that some estimate of the degree of uncertainty must enter into a responsible prediction" (p. 21). But *all* scientific prediction is "contingent upon subsequent events" (*e.g.*, a predicted eclipse of the moon will occur only if something untoward doesn't happen in the meantime); social prediction is no different from physical prediction in that respect.

(2) In discussing political science, the authors note the development of the "behavioralist" movement after World War II. They go on to say: "At first, this new approach was resisted by some who held to more classical political theory. Fortunately, the tensions that arose have largely disappeared, and now there is a recognized division of labor between the more classically oriented political theorists and the contemporary quantitatively oriented empiricists" (pp. 38-39). The use of modern scientific methods urged by the behavioralists is so fundamentally opposed to the nonscientific procedures commonly used by the classical political theorists that one wonders how a productive division of labor could be established between the two groups.

(3) In discussing the ways in which Game Theory can "illuminate" many types of group behavior, the authors note that in this nation no political party has been able to maintain a stable level of support much over the 50 per cent level for more than a short time, and that in European parliamentary coalitions usually only a small majority is maintained. The authors then say: "Unless we are to attribute these observed facts to coincidence, they must have an explanation somewhere deep in the machinery of democracy. Game theory shows how an explanation of the 'minimum-size principle' can be derived rigorously from simple assumptions. The basic idea is that minimum-size groups have all the power they need to govern; the price they must pay (in terms of concessions and compromises on issues) to attract or to retain additional adherents will be greater, the theorem shows, than anything the core group can hope to gain from the additional strength" (pp. 79-80). The reader is not told how

the Game Theory explanation "illuminates" the "deep" workings of democracies. Nor is the reader given any evidence that Game Theory yields a more useful description of the occurrence of "minimum-size majorities" than a description simply in terms of the group-in-power's unwillingness to make more concessions than necessary to retain power. To translate the latter description into Game Theory notions (even if they "can be derived rigorously from simple assumptions") doesn't improve whatever scientific warrant the description may have.

(4) The authors cite a study of 80 cultures, based on the Human Relations Area Files, showing that in cultures "in which male children were subjected to various sorts of physical stress during the first two years of their lives, the adult males averaged 2.7 inches taller than the adult males in those cultures in which the male infants were not so stressed, even though the racial backgrounds of the cultures were matched as carefully as possible. These somewhat surprising results are being checked by contemporary studies in Africa, for they appear to have implications for child-rearing that should not be overlooked. Apparently an appropriate amount of physical stimulation may be a good thing in infancy" (p. 111). As it stands, such a statement (whatever may be in the original research report) strongly suggests a *post hoc, ergo propter hoc* procedure, and seems to assume, without giving evidence, that increasing height is an unqualified "good thing."

(5) In illustrating the benefits students may expect from studying behavioral science materials, the authors say that a student will learn "that mental illness is a product of traumatic relationships between individuals—parent and child, husband and wife, worker and supervisor, and so forth—with perhaps a genetic component as well in some kinds of illness" (p. 262). The emphasis on *individuals* ignores the socio-cultural aspects that many workers believe to be involved, and the passage quoted suggests that traumatic relationships always or often lead to mental illness.

(6) On the last page of the main text, the authors say: "the behavioral and social sciences are *potentially* some of the most revolutionary intellectual enterprises ever conceived by the mind of man. This is true basically because their findings call into question traditional assumptions about the nature of human nature, about the structure of society, and the unfolding of social processes. They challenge the inevitability of business cycles, the instructional and rehabilitative value of punishment, and the superiority of white skin. Psychology has already had a powerful impact on child-rearing and on adults' views of their own sexuality. Economics has

shaken traditional faith in the unregulated market and weakened resistance to planned and directed economies" (p. 272). The illustrations given in the latter part of the quotation are vague. No evidence is mentioned that psychologists or economists in fact have had the influences stated. Possibly those workers were as much influenced by the social changes vaguely referred to as they influenced those developments. And even if psychologists and economists had the impact suggested, we are given no evidence that their views are scientifically sound.

II

IN ADDITION TO THE CRITICISMS indicated above, naive and sometimes inconsistent remarks are found in the book about the relation of behavioral scientists to the government. The authors give several reasons for urging that the proposed annual Social Report to the nation be "tried out on a private basis," including their fears that a Report sponsored by the government would be caught up in partisan issues and be less objective than a privately sponsored Report (pp. 106-07). Yet they also suggest that the Report might be taken over by government eventually, and in other parts of the book show little awareness of the problems posed by direct governmental sponsorship of behavioral research. The blithe ignoring of such issues seems especially inappropriate for behavioral scientists, who presumably should have shed their political innocence and should be especially vigilant in defending their freedom of inquiry.

The authors are favorably impressed by the work of the Council of Economic Advisers and suggest the establishment at some future time of a "permanent council of social advisers" (p. 109). Yet as the Council of Economic Advisers now functions, the policy advice it gives can hardly deviate from what the President deems politically expedient. Such an official advisory group is simply not in a position to urge publicly the elimination of unsound economic policies that are strongly supported by the President and the Congress. A group of scientists could report privately to the President without encountering such difficulties. Or a scientific group could be responsible to the general public. But in our political system official public status for an advisory group is a strong guarantee that its policy recommendations will harmonize with the views of the group in power.

Although the authors emphasize how controversial issues in behavioral inquiry can be, they give no indication that such matters have a bearing on increased federal funding. Scientifically warranted assertions and policy

recommendations based on those assertions may be so unpalatable to politicians that they will not provide the financial support desired or needed. The lure of large amounts of federal money may lead behavioral scientists into a situation in which they cannot function as scientists but can function only as special pleaders for the politicians in power.

Already apparent is the fact that some existing governments recognize how important the work of behavioral scientists will become. For example: the Communist party in the Soviet Union has taken great pains to control the work of behavioral scientists with a view of ensuring that they serve the interests of those in power; and in the United States during recent years each political party when in office has used some behavioral scientists in ways evidently intended to further the retention of power.

Many people today are so impressed with the benign aspects of democratic or republican forms of government that they forget the lessons of history. The first democratic government in Europe following the French Revolution, which was inspired in part by the success of the American Revolution, beheaded Lavoisier, the father of modern chemistry. On the other hand, much early scientific work in the 17th and 18th centuries was made possible because benevolent despots in various European countries chose to defy some religious leaders and protect a few scientists as well as support their inquiries. More recently, the economic advisers of an American President apparently have endorsed economic action so unsound that, in the words of a distinguished Harvard professor, it should "make every economist blush."

III

IN SHORT, AN IMPORTANT LESSON to be learned from the experiences of history is that scientists should not expect to be assured of unrestricted freedom of inquiry and discussion as the servants of the government, any form of government, nor by any vested interests having special privileges or positions of power that those interests desire to defend and perpetuate. Especially should behavioral scientists be wary of becoming the tool of agencies that may inhibit full freedom of inquiry and discussion, because, of the three major fields of science—physical, physiological, and behavioral—the last deals almost continuously with controversial matters

In recent years, the Behavioral Research Council¹ has suggested a code

¹ During the 1950's, George A. Lundberg, Stuart C. Dodd, and E. C. Harwood held conferences with leading behavioral scientists in Claremont, California; Seattle, and New

for behavioral scientists analogous to the Hippocratic Oath and the legal code of ethics. It is:

My primary and overriding moral commitment or obligation is to serve as a behavioral scientist for the purpose of seeking solutions for the problems of men in society and publicly informing my fellow citizens as to the results of such scientific research. This implies:

(1) Relying in such inquiries on the methods of modern sciences in their evolutionary development.

(2) Endeavoring continually to improve my own ability as a scientist to develop warranted 'if-then' conclusions or assertions by applying scientific methods and by subordinating any personal biases in order to assure objectivity in my work and findings.

(3) Avoiding all conflicts of interest (such as might result from employment by special interests, etc.) that might inhibit scientific work or bias me in any way tending to pervert scientific inquiry.

(4) Differentiating clearly in all writings and public statements so that those to whom I communicate will understand whether I am speaking or writing in my role as a scientist within my field of competence or am simply urging in my role as a citizen or in some other specified role a course of action that I personally prefer.

(5) Criticizing as unscientific, without fear or favor, all purportedly scientific reports within my field of competence that (in the absence of such criticism) could be expected seriously to mislead my fellow citizens, whom I have chosen to serve.

Does anyone imagine that men who were conscientiously following such a code would choose to be dependent on funds from any government?

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York for the purpose of forming a new organization expected to facilitate cooperation among behavioral scientists in the various fields. Development of common methods, of technical terminology (to the extent practicable) applicable in all the fields of inquiry, and of the cross-fertilization that might be expected to result were to be aims of the new organization. The Behavioral Research Council was formally organized in 1960 at Claremont, California.

The first research project undertaken was a survey of progress in all of the behavioral sciences. The results of this research were published in *A Current Appraisal of the Behavioral Sciences* in 1964. Because this publication has been widely regarded by scientists in many of the behavioral fields as the most comprehensive and useful publication of its kind ever published, the Behavioral Research Council is undertaking a revision of the first edition with anticipation of a completed second edition in 1971.

Factors Inhibiting Appalachian Regional Development

West Virginia, a Case Study

By CARL W. HALE*

A LARGE PART of the diverse geographic area making up Appalachia remains stagnant despite the phenomenal business expansion of the period 1961-68 and in spite of the efforts of the Area Redevelopment Administration (ARA), the Economic Development Administration (EDA), and other federal agencies.¹ Unfortunately, Appalachia continues to play its historic role as a barrier to east-west commerce, and the region itself continues to generate economic activity at a slower rate than the rest of the nation, although 18 Standard Metropolitan Statistical Areas are located within the Appalachian region.²

It should be realized that Appalachia, as defined by the Appalachian Regional Commission, is to some extent a political conglomeration of "Appalachias." Between 1962 and 1965, the annual rate of employment change for Appalachia was 2.3 per cent as opposed to 3.2 per cent for the nation. However, the Appalachian portions of the various states making up the region registered markedly different annual growth patterns during the period. Only the Appalachian portions of Kentucky, New York, Ohio, Pennsylvania, Virginia, and West Virginia registered slower growth rates than the nation. It is the Appalachian portions of

* The author (professor of economics at Memphis State University) expresses his thanks to Robert Main, William Miernyk, and Anthony Stocks for numerous helpful suggestions with regard to this paper. The time and facilities necessary to complete surveys and other supporting work related to this article was provided by the Bureau of Business Research and the Office of Research and Development of West Virginia University. See: Carl W. Hale, *The Contribution of Local Subsidies to the Economic Development of West Virginia*, (Bureau of Business Research and Office of Research and Development), West Virginia University Economic Development Series, No. 12, January 1969.

¹ The Area Redevelopment Act was passed in 1961, the Public Works Acceleration Act in 1962, the Public Works and Economic Development Act in 1965, the Appalachian Regional Development Act in 1965, the Manpower Development Act in 1962, and the Economic Opportunity Act in 1965. There are also numerous pieces of development legislation that have had some impact on Appalachia. Discussion of this legislation ought to be strictly separated from welfare activities, such as the program involving the distribution of surplus commodities.

² For an extensive discussion of the various attempts made to bridge the Appalachian barrier prior to the Civil War see: Carter Goodrich, *Government Promotion of Canals and Railroads* (New York: Columbia University Press, 1960).

these states that have depressed the overall Appalachian employment growth rate below that of the nation.³

The total population in the Appalachian region in 1960 exceeded 15 million, but only 47.5 per cent of this population was classified as being urban. Furthermore, the region suffered an absolute population decline of 3.1 per cent in metropolitan areas and 5.1 per cent in non-metropolitan areas during the 1950-60 census years for persons 18-64 years of age—the most economically-productive age group. The total net migration from the Appalachian region between 1950 and 1960 was over 2 million persons.⁴ Although Appalachia as a whole has experienced some intra-regional specialization, *i.e.*, steel works in Birmingham and Pittsburgh as opposed to industrial chemicals in Charleston, West Virginia, and concentrations of textile manufacturing in the Southern Appalachians, much of the overall region has been homogeneous with regard to a history of dependence on either bituminous coal mining and/or low productivity farming.

Although West Virginia occupies the geographic center of Appalachia and exhibits many of the economic characteristics common to the whole region, it is not a completely representative gauge of the region as a whole. However, attempts at developing a truly integrated Appalachian regional economy depend on the development of the transportation facilities of the region, particularly in West Virginia.⁵ The Appalachian economy is economically segmented: the various economic activities of the region are more closely linked with industrial activity in other regions than with economic activities within the region.⁶

When the discussion is confined to West Virginia, the major factors

³ Appalachian Regional Commission, *Appalachia*, Vol. 2 (November 1968), pp. 27-29.

⁴ Out-migration from Appalachia has tended to develop around two axes: the pull of East North Central cities such as Cincinnati and Cleveland on the populations of East Kentucky and North Central West Virginia, and a "District of Columbia migration system," reflecting the pull of Washington, D.C., on migrants from the eastern portions of West Virginia and the mountainous western portions of Virginia. See: James S. Brown and George A. Hillery, Jr., "The Great Migration 1940-1960," in Thomas R. Ford (ed.), *The Southern Appalachian Region; A Survey* (Lexington: University of Kentucky Press), pp. 64-65.

⁵ The purpose of the development highway system is to connect the various regions comprising Appalachia with major centers outside the region. The region will be a relative increase in interconnectivity (commodity movements, migration, and commuting) between Appalachia and Non-Appalachia. However, such a development will also cause an increase in connectivity within the Appalachian Region.

⁶ *Ibid.*, p. 55. This segmentation becomes a problem, because it weakens the intra-regional spread effects which would otherwise develop as a result of expansions of economic activity in the growth centers of the region.

contributing to this segmentation and inhibiting growth in the state appear to fall into three main categories: (1) the non-standard transportation system; (2) the paucity of public investment, the antiquated governmental structure, and the attitudes of the state; and (3) the industrial structure of the state. The state of West Virginia constitutes a satisfactory unit of study because its geographic location makes it of crucial importance in the developmental highway plans for the state and in the Appalachian interstate highway systems.⁷ Furthermore, many of the political and economic problems faced by the local units of government in the state are common to the Appalachian counties of other states.

I

Non-Standard Transportation System

THE TRANSPORTATION AND COMMUNICATION SYSTEMS constitute the major integrating factors in a market system. Thus, it is largely the development of the transportation system that furnishes the more important location factors (whether market orientation or raw material orientation is involved) in a market-directed economy. However, location studies dealing with manufacturing activity generally show that market orientation is the major factor determining the geographic incidence of private investment in the United States.⁸ The importance of market orientation as a location factor reflects the transportation rate structure as well as the "connectivity" of the transportation network, and indicates that the costs of distribution are the dominant factor in determining plant location over a wide range of industries.⁹

The close relationship between the transportation and communication systems and industrial location reflects the impact of national transporta-

⁷ Total Appalachian highway mileage amounts to about 2,500 miles, with the West Virginia share of the program involving over 400 miles of highway. The interstate highway program in West Virginia involves the construction of more than 600 miles of interstate highway.

⁸ Glenn E. McLaughlin and Stefan Robock, *Why Industry Moves South*, National Planning Association Committee of the South, 1949; H. S. Perloff, *et al*, *Regions, Resources, and Economic Growth* (Baltimore: John Hopkins Press, 1960), p. 394.

⁹ For a discussion of some measures of "connectivity of the Interstate Highway System," see *Papers and Proceedings of the Regional Science Assn.*, 1960, Vol. VI pp. 121-37. For a historical description of the effects of freight rates on economic development see: William H. Joubert, *Southern Freight Rates in Transition* (Gainesville: University of Florida Press, 1949). Leland H. Jenks, "Railroads as an Economic Force in American Development," *Journal of Economic History* 4 (1944); Thomas Senior Berry, *Western Prices Before 1861* (Cambridge: Harvard University Press, 1943); Louis B. Schmidt, "The Western Movement of the Wheat Growing Industry in the United States," *Iowa Journal of History and Politics* 18 (July, 1920); Robert G. Albion, "New York Port and Its Disappointed Rivals, 1815-1860," *Journal of Economics and Business History* 3 (1930).

Table 1
WEST VIRGINIA HIGHWAY SPENDING AND
FEDERAL INTERSTATE APPORTIONMENTS
FY 1957-1969

Fiscal Year	New Construction (\$1,000,000)		Maintenance		New Construction Interstate System	West V Apporti
	Primary ¹	Secondary ²	Primary ¹	Secondary ²		
1969	—	—	—	—	—	86
1968	—	—	—	—	—	77
1967	—	—	—	—	—	68
1966	25.2	7.1	10.4	12.9	63.4	42
1965	23.8	4.2	7.8	10.1	51.9	40
1964	15.8	2.5	8.3	9.9	30.0	39
1963	11.4	2.5	20.5	16.1	13.1	36
1962	11.9	2.4	18.4	16.6	19.9	27
1961	11.4	2.5	17.9	17.0	19.9	22
1960	17.1	2.7	14.0	15.6	38.0	31
1959	22.1	1.9	14.4	12.1	19.0	26
1958	21.9	0.9	12.9	14.4	—	20
1957	20.4	1.2	13.9	12.2	—	13

SOURCE: Letter from John R. Provan, Acting Director of Administration, U.S. Department of Transportation, Virginia Blue Book.

¹ The West Virginia Primary highway system consists of all highways connecting counties.

² All other West Virginia highways except the interstate system.

³ Interstate highway funds apportioned to West Virginia but not necessarily obligated by the state.

⁴ The per cent of National funds appropriated for interstate highway construction apportioned to West Virginia.

tion policy on regional growth. Thus, any regional development program must adapt itself to the evolving transportation system and to the subsidies extended to the various competing transportation modes if it is to have any chance of success. From this it would seem that a national transportation policy ought to be the basic platform of any national and regional development program, and it suffices to say that once the national transportation policy has been set or has evolved through economic and political pressures, the regional development policy can only be adapted to it. Furthermore, it is clear that regional developmental programs can be rational only in so far as the national program is rational.

A major factor retarding economic activity within West Virginia is the non-standard transportation system—specifically, the highway system of the state. This low-quality transportation network stretches economic distance, *i.e.*, the time required to move goods and services from one point to another in the state, and severely impedes the establishment of a wide range of industries in the state that are dependent on truck transportation, either for obtaining raw materials and/or components or in distributing final products. Given the existing importance of distribution costs and consequent market orientation of large segments of the manufacturing industry, an efficient short-haul transportation system is needed for the Appalachian region.¹⁰ The need has been largely met throughout the rest of the country by the interstate highway system, financed under the auspices of the Federal-Aid Highway Act of 1956. A look at the data available in the 1963 *Census of Transportation* indicates the importance of the motor carrier as a transportation mode. Clearly, the use of truck transportation is related to the length of haul of manufactured products, or put another way, to the degree of market orientation of the commodity.¹¹

One of the most obvious aspects of the non-standard nature of the highway system is the average travel time on West Virginia (or Appalachian) highways. The existing Appalachian highway system, because of its steep grades and narrow winding roads, places severe restrictions on the region's ability to support industries depending on truck transportation. Average travel time of the primary highway system now in place in much of West Virginia is close to 45 miles per hour (for passenger

¹⁰ President's Appalachian Regional Commission *Appalachia: A Report To The President From The Appalachian Regional Commission*, 1964 (Washington: U.S. Government Printing Office), pp. 32-34.

¹¹ The median distance that commodities were shipped was computed from "distances shipped" distributions. The average distance shipped of manufactured goods was about 255 miles, with the average distance for specific commodity groups ranging from about 139 miles in the case of "stone, clay, and glass products" to over 486 miles in the case of "machinery."

cars).¹² Furthermore, the average speed of truck transportation on West Virginia highways falls well below 45 miles per hour because of the steep grades of the highway system.¹³

In contrast, travel time on the interstate system averages 60–70 miles per hour for passenger or commercial vehicles. This causes at least a doubling of economic distance where commercial traffic is concerned in the state—except for that portion of the region being served by the West Virginia Turnpike.¹⁴ Any increase in the volume of truck transportation on the existing West Virginia highway system tends to sharply decrease the capacities of West Virginia roads. The effect of a dual-axle truck is equivalent to two passenger cars on level terrain, and four and eight cars, respectively, in rolling and mountainous terrain—and a very large part of the West Virginia primary road system is in rolling terrain.¹⁵

The viability of the motor truck in the American transportation system does not arise because this mode of transportation is low-cost—it clearly is not, where long hauls are involved. Truck transportation is demanded because of the dependability and flexibility of motor transportation. This flexibility cuts down on the lead time required for ordering a raw materials and components, reduces inventory requirements and, because of door-to-door service, reduces the transfer costs associated with the physical handling of goods.

In addition to the advantages of flexibility associated with the use of motor transport, improved highways in central Appalachia would reduce the operating costs of motor transportation in the region.¹⁶ Thus, highway improvements that decrease the operating time of motor vehicles also confer operating savings, or benefits, on the users of the highway improvements. The benefits to commercial highway users of time saved as a result of highway improvements (upgrading of highways to interstate

¹² For a technical discussion of this problem see: Harry C. Schwender, O. K. Normann, and James O. Granum, "New Methods of Capacity Determination for Rural Roads in Mountainous Terrain," *Highway Research Board*, Bulletin 167, 1957.

¹³ *Ibid.*, p. 11. It should be noted that faster speed can be attained on that portion of the West Virginia highway system located in the western part of the state. Here, traffic is light and highways, running in a north-south direction, follow the mountain valleys.

¹⁴ It should be noted that the western portion of the turnpike begins in Bluefield, West Virginia, while the turnpike-interstate highway terminates in the west at the border of east Kentucky. Thus, the turnpike-interstate highway begins and ends in Appalachia.

¹⁵ *Ibid.*, p. 11.

¹⁶ For an extended discussion of this problem along with a bibliography see: *Supplementary Report of the Highway Cost Allocation Study*, U. S. Department of Public Roads, 1965, pp. 212–36.

standards) that allow higher speed, decrease the accelerations and decelerations, and reduce grade changes contribute to the viability of truck transport in the region.¹⁷ The benefits are large, ranging from about \$3 per hour in the case of small, two-axle, single-unit trucks to more than \$4 per hour for six-axle truck-trailer combinations.¹⁸ Such benefits would confer new locational advantages to industrial sites in West Virginia as well as make possible truck transportation "through" the central Appalachian region.

The highway system is an important factor in attracting industry into a specific geographic region, particularly when marked differences exist in highway standards in adjoining regions. For instance, industries such as apparel, textiles, and fabricated metal products—industries having wage bills that are important relative to their other costs—are attracted to low-wage areas in the lower south. However, they have largely bypassed much of Appalachia, probably because they are dependent upon truck transport. Of course, what is needed is a well-developed transportation system encompassing all modes of transportation—when one important mode is lacking, the impact made by the presence of other forms of transportation is dampened. This situation develops because a firm often receives raw materials via one mode of transportation while using a different form of transportation in shipping its final product. The inability of West Virginia to act promptly, after the passage of the Federal-Aid Highway Act of 1956, to start construction on her part of the interstate highway system has been a serious handicap to state (and Appalachian) development during the recent business expansion.

The degree to which this handicap has been reflected in slower rates of economic growth has been dependent upon the extent to which decentralization of investment has occurred since 1960. This process of investment decentralization has been widespread and was reflected in the statistics of Standard Metropolitan Statistical Areas (SMSA's). In the period from 1958 to 1963, value added by manufacturing grew 44.1 per cent in areas outside SMSA's as opposed to 32.8 per cent inside SMSA's. The dispersion of industry was particularly strong in the Midwest, the Great Lakes, and the Southwestern States—areas encompassing and surrounding the Appalachian region.

¹⁷ It is clear that, for rather long periods of time, the pay scales of the independent haulers and the over-the-road workers represented by the International Brotherhood of Teamsters are basically independent of any time saved by highway improvements. See: National Master Freight Agreement (April 1967 through March 31, 1970), Articles 48, 49, 50, and 51.

¹⁸ Bureau of Public Roads, *Supplementary Report of the Highway Cost Allocation Study*, 89th Congress, 1st Session, House Document No. 124, p. 221, Table 62.

It should be noted that the demand for truck transportation services is dependent upon the length of the haul and the bulkiness of the cargo as well as the size of the plant initiating the shipment. Truck transportation generally is not well-suited to handling long-haul, bulky cargoes. However, smaller manufacturing plants typically make much greater use of truck transport than any other means of transportation.¹⁹ This last relationship perhaps reflects the importance of sub-contracting operations where smaller plants are concerned. In this case the sub-contractor is likely to be located close to its potential market and thus finds the trucking tariff rates satisfactory and the flexibility of road transportation desirable.

Another factor has also been at work to cause a geographic fragmentation of functions of plants located in large metropolitan areas. The increasing urban land values and highway congestion within the core city have caused a geographic redistribution of functions of the firm, causing a corresponding shift in land use within and without the urban area.²⁰ This geographic differentiation of function within the firm is clear where a manufacturing firm also undertakes considerable administrative and warehousing activities. As Robert M. Haig has so clearly pointed out, the administrative function may remain in the urban area while the manufacturing and warehousing functions may be moved to the urban hinterland under the pressure of rising urban congestion and land values.²¹ However, the various functional activities of the firm are likely to be close enough together to make the flexibility of highway transportation desirable.

The mountainous and rolling terrain of the state, coupled with the rather poor local highway system, has caused land use regulation to assume more importance in West Virginia than in other areas as economic development of the state proceeds. While zoning often has been thought of as a conservative form of regulation, having its main importance in the preservation of property values by prohibiting non-complementary land uses from being established in close proximity to one another, zoning regulations could have been a powerful tool of regional development.

Where flat land, suitable for modern industrial sites or for low-cost residential development, is scarce, properly executed urban and rural zoning ordinances can be a major factor in successful economic development.

¹⁹ Walter F. Buhl, "Intercity Highway Transport Share Tends to Vary Inversely with Size of Plant," *Highway Research Record*, No. 175, Highway Research Board, pp. 9-14.

²⁰ Carl W. Hale, "The Mechanism of the Spread Effect in Regional Development," *Land Economics* 43 (November, 1967), pp. 438-39.

²¹ Robert Murray Haig, *Major Economic Factors in Metropolitan Growth and Arrangement*, Regional Survey, Vol. 1 (New York: Regional Plan of New York and Its Environs, 1927), pp. 39-43.

Rural planning and zoning in Appalachia might be designed to do several things: to foster restoration and economic use of reclaimed mined areas, to facilitate the blocking up of forest areas, to guide summer home seekers to areas where public services can be economically provided, to protect existing and potential water-oriented and forest-oriented recreation areas, to prevent waste of tax money as a result of the construction of access roads, sewers, and water mains, and other service facilities, to guide suburban encroachment into rural areas, and to protect roadsides from distracting clutter.²²

However, zoning in rural areas in Appalachia and West Virginia should constitute an attempt at more than simply protecting natural resources. It should also facilitate the economic use of a scarce resource—land—for commercial and industrial uses. Furthermore, open-country zoning must be on a multi-county level, as local government in rural areas is incapable of carrying out a rational zoning plan.²³ Severe land use problems will arise as the interstate network is completed in West Virginia and in other parts of Appalachia. Whether or not these problems will be resolved will depend on the creation of rational zoning ordinances, along with a well-staffed multi-county organization to implement the zoning ordinances.

In addition to multi-county zoning ordinances and organizations, additional local tax measures are necessary to encourage the development of land at its highest and best use. A new system of local property taxes based on the potential use of land rather than its actual (unimproved) use is required if land speculation is to be minimized. That is, local real estate taxes ought to constitute not only a source of local revenue, but should also serve as a tool of planning and development.²⁴ Land speculation in urban areas is a primary cause of urban sprawl—a feature obvious in most American cities. Urban sprawl is an integral characteristic of the institutional organization of our urban areas and is associated with various forms of social cost.²⁵ However, land speculation in areas such as West Virginia, where land suitable for commercial and industrial development is truly scarce, is flying in the face of rational development

²² Erling N. Solberg, *Suggestions for Planning and Zoning in Appalachia*, Economic Research Service, U. S. Department of Agriculture, p. 111.

²³ For a discussion of the legislation and underlying planning necessary for the implementation of zoning ordinances in West Virginia see: Anthony H. Stocks and William Thompson, *Land-Use Regulation to Promote Highway Objectives in West Virginia: A Research Summary*, Research Report V, Project State Road Commission—10, West Virginia, (May, 1966), pp. 9–15.

²⁴ Marion Clawson, "Urban Sprawl and Speculation in Suburban Land," *Land Economics* 38 (May, 1962), p. 109.

²⁵ *Ibid.*, pp. 99–108.

policy. Rational development requires that scarce resources be rationally utilized, and in West Virginia (and in Appalachia in general) no natural resource is more scarce than land suitable for low-cost industrial, commercial, or residential developments.

II

Public Investment, Governmental Structure, and Regional Attitudes

IT SHOULD BE ACKNOWLEDGED that the slowness of West Virginia to implement the interstate highway program reflects certain weaknesses in the structure of the West Virginia government, along with heavy maintenance commitments to the existing, largely rural road system. The main source of funds for capital and maintenance expenditure are user taxes—state appropriations from general revenue and the total bond issues for highway purposes (excepting the West Virginia Turnpike) have been modest.

The fledgling interstate highway program in West Virginia has been continuously hampered by lack of funds. And although the interstate construction program is financed on a 90 per cent-10 per cent basis, West Virginia has been hard-pressed to come up with the necessary 10 per cent matching funds. This reflects West Virginia's inadequate fiscal capacity along with a heavy commitment to the rural road system of the state. Since the state is responsible for all county road construction and maintenance, the state has faced in recent years an annual outlay of over \$18 million (new construction and maintenance) for the secondary road system.²⁶

In fact, during Fiscal Years (FY's) 1963, 1964, and 1965, maintenance on the primary road system of the state suffered cutbacks as capital spending for the West Virginia interstate system increased from over \$30 million to nearly \$64 million per fiscal year. (See Table 1.) The development highway program, begun under the auspices of the Appalachian Regional Commission, is still in the planning stage in West Virginia. However, it is clear that it will face even worse funding problems—because matching grants are less liberal for developmental highways than for the interstate highway system.²⁷

At any rate, the \$18 million that the state has laid out annually for secondary roads could have been parlayed into about \$180 million per year in interstate construction for most of the years since 1956, provided

²⁶ J. Howard Myers (compiler and ed.), *West Virginia Blue Book* (Charleston: Jarrett Printing Company, 1966).

²⁷ For an elaboration of this point see sec. 201 of Public Law 89-4 (Appalachian Re-development Act of 1965). Under this program the federal matching funds may vary from 50 to 70 per cent of the total cost of the project.

that matching federal funds had always been available for interstate highway construction in West Virginia. However, the heavy rural population in West Virginia, through democratic processes, along with some rural over-representation in the state legislature has tended to siphon off funds into the rural areas of West Virginia—funds that, if they had been spent on the interstate system, might have favorably affected West Virginia development during the last business expansion.

Cost studies of ten West Virginia counties over the last nine years show that maintenance costs per foot-mile on secondary roads have increased constantly.²⁸ This rising cost has and probably will continue to exercise real pressures on the funding base of the West Virginia highway and road system. In 1961, over 40 per cent of the user-tax revenues collected in the state went to roads generating only 25 per cent of the total state traffic.²⁹ It would appear from state highway department expenditures that the secondary road system of West Virginia was better maintained in 1962 than was the primary road system. It is likely that before the Highway Act of 1956 was passed, the secondary road systems of all the states received a much higher proportion of maintenance aid than the traffic generated on these roads would justify.³⁰ However, West Virginia's fiscal policy still reflects the state's rural attitudes. Thus, state highway officials have adopted the practice of allocating only enough funds for main highways to match federal aid for primary and interstate construction along with related maintenance expenditures.³¹ Thus, when cut-backs were necessary because of the meager tax resources of the state, it was the interstate system and finally the primary road system that were most adversely affected.³²

²⁸ Robert Gibson Corder, "West Virginia Secondary Road Maintenance Responsibility; A Preliminary Study," unpublished thesis, West Virginia University, 1966, p. 64.

²⁹ Bertram H. Lindman, *An Exploratory Investigation of Local Road Financing in West Virginia*, An Economic Report to the State Road Commission of West Virginia (July 1963, p. 28.

³⁰ Philip H. Burch, Jr., *Highway Revenue and Expenditure Policy in the United States* (New Brunswick: Rutgers University Press, 1962), pp. 161-63.

³¹ Lindman, *op. cit.*, p. 30.

³² Although West Virginia had an unobligated balance of interstate funds in December, 1967, of nearly \$100 million (the total percentage of unobligated funds for FY 1968 and all apportioned funds for FY 1969), the state has never allowed apportioned federal-aid interstate funds to lapse. A state can retain a claim on federal funds apportioned for a particular fiscal year for the remainder of that year plus two more fiscal years before the state must obligate the funds or else lose its claim on the apportioned funds. Since FY 1960 funds have been apportioned on the basis of construction costs, high-cost segments of the system, such as urban areas and mountainous regions, have received a larger share of apportioned funds. Because of the new formula, West Virginia's apportioned share of interstate funds has increased, putting pressure on the state government to revamp the state's tax structure so the state will be able to utilize the funds.

The historical development of the taxing and spending powers of the state and local governments of West Virginia has resulted in a highly centralized decision-making process governed by the necessity of catering to a largely rural population.³³ This pattern of decision-making has been coupled with a state tax structure which places heavy reliance on the retail sales tax. This dependence on a regressive general sales tax, along with heavy out-migration from the state, and with rather slow rates of growth of state personal income received, has resulted in a weak tax base for West Virginia.

Untapped sources of revenue exist for the state. However, the existing tax structure, based largely on personal income received rather than income produced, represents an institutional arrangement which prevents the taxing capacity of the state government from growing with advances in economic activity. Since the concept of capacity is somewhat ambiguous, it should be indicated that there are at least three measures of fiscal capacity that can be developed: income received, income produced, and a composite or average tax system based on the observed taxes and tax rates now in force in the various state and local units of government. It must be admitted that West Virginia's fiscal capacity is less than the national average for all three measures. But from the standpoint of income produced the state's fiscal capacity is relatively much stronger. (see Table 2). Furthermore, since the concept of fiscal capacity is relative, under no circumstance does a weak fiscal capacity mean that a state cannot undertake key public projects.

It should be noted that West Virginia's deficit of social investment represents a problem of resources as well as of values and governmental organization. The latter problem, it would appear, is the more important limitation on the economic development of the state. The overall capac-

It has often been argued that high construction cost segments of the interstate system have been discriminated against by the federal legislative apportionment formula. However, such an argument is largely unfounded, as a large portion of the total cost of highway facilities represents land acquisition costs. Furthermore, since FY 1960 the apportionment formula has been based on construction cost; thus, a state like West Virginia is particularly favored—West Virginia land acquisition costs are low while construction costs are high relative to other open country segments of the interstate system. The argument that the mountainous states should receive more liberal matching funds because of higher construction costs is equally unfounded, for basically the same reasons. The land acquisition costs are low in West Virginia, acquisition costs are also low; thus, the total costs of land acquisition and construction are of the same magnitude as total costs elsewhere. It should be noted, however, that rural population in West Virginia is very densely settled along existing highways so that costly relocations may be involved when highways are rebuilt or widened.

³³ Claude J. Davis, *West Virginia State and Local Government* (Morgantown: Bureau for Government Research, West Virginia University, 1963), p. 174.

ity of the state to raise tax revenues necessary to implement any program of social overhead investments depends on some measure of income, since all taxes, as well as savings, must be drawn out of current income. A comparison of per capita income received and per capita income produced in West Virginia and in the other states in the U.S. shows that the state's per capita personal income received was only 76 per cent of that of the nation in 1959, but state per capita income produced was 81 per cent of the U.S. figure.³⁴ This differential between the two measures probably reflects absentee ownership of mines and other production facilities in the state. In fact, all mining regions register this same phenomenon.

The Advisory Commission on Intergovernmental Relations measures of per capita yield of representative state and local tax systems show West Virginia's per capita yield to be only 74 per cent of the nation's in 1960. This indicates very clearly that the "composite" state and local tax system (a system depending heavily on income received) faces capacity limitations in West Virginia, or in other states where the extractive industries are important. Therefore, West Virginia's solution to her fiscal problems should not be patterned after the "average" state and local tax system in operation in the U.S. It should be tailored to take advantage of the state's own resources—specifically the income produced in mining and in other important economic activities, such as the production of industrial chemicals. Although the tax effort expended by all the Appalachian states (except Maryland) is less than that of the nation, on average, for both income received and income produced, the lower levels of per capita income in the Appalachian region cause the severity of the tax burden to the region to be greater than the average for the nation. However, in the case of West Virginia, the tax severity, reflecting existing tax levels, is much less when a tax base of income produced is used (*vs.* a tax base of personal income received).

Although West Virginia's per capita capacity to generate tax revenues is at least 19 per cent below that of the nation, this does not mean that taxes could not be generated without additional tax severity. A severance tax that would have amounted to a mere 3.2 per cent of the value of only oil and gas produced in West Virginia (no severance tax is now collected in West Virginia or in any other important coal producing state) would have yielded over \$7 million in tax revenues to the state in 1960.³⁵ This would produce about \$70 million in funds for the West Virginia highway

³⁴ Advisory Commission on Intergovernmental Relations, *Measures of State and Local Fiscal Capacity and Tax Effort* (Washington: U. S. Government Printing Office, October, 1962), pp. 54-55.

³⁵ *Ibid.*, p. 39; pp. 148-49.

program, assuming the customary 90 per cent matching grants were forthcoming from the Federal Government. Assuming a total cost of facility of about \$2 million per mile for the interstate system in West Virginia, the state could complete about 35 miles of construction per year.³⁶ Had this severance tax been enforced since 1956, West Virginia could have completed her sections of the interstate highway system on time.

West Virginia does have a gross receipts tax on natural gas sales. However, considerable difference exists between the value of marketed production and gross receipts of natural gas sales—this difference reflects field and inplant use of natural gas. The severance tax is customarily thought of as being applied to marketed production; this catches the industrial establishments' use of natural gas. For instance, in 1966 sales of natural gas constituted about 87 per cent of marketed production of natural gas in West Virginia.³⁷

The application of a severance tax on oil and gas production in West Virginia would have little or no effect on crude oil and gas production in the state. In the first place, the 27.5 per cent depletion allowance constitutes a subsidy to producers of crude oil and gas.³⁸ Thus, a state severance tax tends only to reduce the level of federal subsidy to the producer. The application of the severance tax is, in effect, a rebate to the state of the federal subsidy to producers and property owners. The effective subsidy to the producer has been reduced but still stands at 16.45 per cent, which is enough to encourage investment in industry.³⁹

³⁶ For a comparison of the relative costs of constructing the interstate highway system see: Joint Economic Committee, *State and Local Public Facility Needs and Financing*, Vol. 1, Public Facility Needs (December, 1966), pp. 242-43; Conference on the Application of Engineering Technology to The Problems of Appalachia, *Transportation*, Vol. 2, The West Virginia University, College of Engineering, p. 33.

³⁷ For a study of the West Virginia gross sales tax with regard to the taxing of minerals see: Vance Quentin Alvis, *The West Virginia Gross Sales Tax*, West Virginia University Business and Economic Studies, Vol. 7, No. 2 (June, 1960), pp. 1-18; p. 20. Detailed information on the marketed production and levels of consumption (sales) of minerals for the major producing states can be found in the *Mineral Industry Surveys*, published by the Bureau of Mines. The Bureau defines marketed production of natural gas as follows: gas sold or consumed by producers, including gas loss due to natural gas liquids recovery, losses in transmission, quantities added to storage, and increases of gas in pipelines.

³⁸ For a discussion of the nature of this "subsidy" see: Stephen L. McDonald, "Percentage Depletion and the Allocation of Resources: The Case of Oil and Gas," *National Tax Journal* 14 (December, 1961), pp. 323-36; Stephen L. McDonald, "Percentage Depletion and Tax Neutrality: A Reply to Messrs Musgrave and Eldridge," Vol. XV, *National Tax Journal* 15 (September, 1962), pp. 314-26; Stephen L. McDonald, "Percentage Depletion in Federal Taxation of Income From Oil and Gas Production," Proceedings of the Fifty-Fifth Annual Conference on Taxation sponsored by the National Tax Association, 1962, pp. 365-80.

³⁹ Since West Virginia has a gross margin sales tax of \$7.85 per \$100 of sales, the overall level of the subsidy is: $27.50 - (3.20 + 7.85) = 16.45$ per cent.

The institution of a severance tax of only 3.2 per cent of the value of production would probably not have adverse effects on drilling or production activity in the state. Unlike the major producing states, West Virginia has no system of production proration. Thus, West Virginia producers have not been forced to cut back output in order to support market prices. This task has been left to the major producing states—those who have the most to gain by maintaining price stability. Such flexibility gives the West Virginia producer an advantage over producers in states such as Louisiana and Texas, where the severance tax has been higher than the 3.2 per cent rate discussed here, and where there has been an upper limit with regard to production schedules.

In Louisiana, for example, the severance tax amounts to 2.3 cents per 1000 cubic feet of gas. The well-head price of gas in Louisiana averages 18.2 cents. Thus, the severance tax amounts to about 12 per cent of the value of marketed production. It should be noted that West Virginia has a natural advantage in the marketing of her natural gas in that the state is much closer to the national markets than are the major Southwestern producers. It is estimated that the costs of transmission of natural gas range from 1.5 to 2.0 cents per 1000 cubic feet per 100 miles.⁴⁰ This gives West Virginia a considerable pricing margin, as West Virginia gas can be sold at the same price as Louisiana gas in the Midwest and in the Eastern markets but costs much less to move to these markets.

The possibility of a severance tax on bituminous coal production has not been discussed, because the purpose of this argument has been to show only that a tax on income produced by a secondary industry in West Virginia would not have resulted in any appreciable increase in severity of the tax burden levied by the state, but would have generated sufficient funds to complete the interstate highway construction program on time. Moreover, a severance tax of 3.2 per cent of the gross value of West Virginia mine output probably would not have had serious market effects, but would have generated over \$16 million in tax receipts for 1965. It should be remembered that John L. Lewis levied a much heavier "severance tax" on West Virginia and other bituminous coal producing areas to support the United Mine Workers Welfare and Retirement Fund. The mines pay 40 cents per ton royalties to the United Mine Workers, currently over 8 per cent of the value of coal sales. Furthermore, it appears that no adverse market reverberations resulted from the collective bar-

⁴⁰ For a discussion of the transmission costs of moving natural gas see: Committee on Interior and Insular Affairs, *Report of National Fuels and Energy Study Group*, Senate Document 159, 87th Cong., 2nd sess. (Sept. 21, 1962), pp. 160-61; James W. McKie, "The Southern Fuel Economy, *Southern Economic Journal* 29 (April, 1963), p. 271, fn. 4.

gaining contracts made by the United Mine Workers.⁴¹ It also appears that productivity increases in the bituminous coal industry since the 1950's have probably been sufficient to support new taxes in West Virginia without damaging the market position of the industry.⁴² At present, West Virginia levies a tax of only 1.35 per cent of the gross receipts of the bituminous coal industry.

It is possible, however, that the unilateral imposition of a severance tax on bituminous coal produced in West Virginia could cause mining activity to shift out of the state. Thus, a practical solution to West Virginia's tax problem and to the revenue problems of Appalachian states in general would be a federal severance tax on all coal production—a federal tax which could be rebated to the states.⁴³ The severance tax could even be made palatable to mine operators by granting federal income tax credits to firms paying the severance tax. A federal severance tax on coal would go a long way toward providing the new tax revenues required if West Virginia is to provide public services that are complementary to private investment and necessary if the state is to develop.

Perhaps one of the most vulnerable links in West Virginia's institutional structure is the state's executive department. The very weak governor's office prevents the implementation of an effective development program. At present, the governor is limited to a four-year term and cannot succeed himself.⁴⁴ Historically, the budget-making authority of the state was not vested in the governor but was in the hands of a Board of Public Works of which the governor was a member. The seven-man board was composed of elected officials. Thus, there was no necessary agreement between the governor and the other members of the Board of Public Works on budgetary problems and on the fiscal steps needed to encourage the economic development of the state.⁴⁵ However, in 1968 a constitutional

⁴¹ For a summary of major contract agreements in the bituminous coal industry see: *Technological Change and Productivity in the Bituminous Coal Industry 1920-60*, Bulletin 1305, USDL, Bureau of Labor Statistics (November, 1961), p. 131.

⁴² *Ibid.*, pp. 119-120; also see: Edward E. Johnson, *Index Numbers for the Mineral Industries*, Bureau of Mines Information Circular 8275, USDI, Bureau of Mines (1965), pp. 76-82.

⁴³ Lee Metcalf, "A Federal Severance Tax," *Appalachian Review*, 2 (Summer 1968), pp. 3-6.

⁴⁴ Davis, *op. cit.*, p. 174. Also for a detailed discussion of West Virginia's Board of Public Works as a plural executive see: W. W. Kaempfer, *The Board of Public Works, West Virginia's Plural Executive*, Publication No. 18 (Morgantown: Bureau of Government Research, West Virginia University, 1957), pp. 1-6, 72-79.

⁴⁵ It should be noted that the West Virginia Board of Public Works is a lineal descendant of the Virginia Board of Public Works which developed the "Virginia System" of state transportation improvements. This system involved state ownership of and/or the subsidization of internal improvements within the state. In contrast with the Virginia Board of Public Works which aggressively pressed for internal improvements, the West Virginia Board of Public Works has not moved to implement schemes for internal improvements.

amendment gave West Virginia's governors the power to prepare the state budget and to veto budget items after legislative action.

A further limitation of the state's ability to eliminate local bottlenecks that impede state economic development is the state-local governmental relationship defined by the West Virginia Constitution. The state can make grants-in-aid only to the county school districts. No state grants-in-aid can be made to any other unit of local government.⁴⁶ This effectively prevents the state from aiding urban areas that may be potential growth points but which, because of their limited geographic jurisdictions, cannot collect funds for public projects necessary for their development. This limitation is in fact a negation of any state responsibility for the urban area—a restriction that is antiquated and that perhaps reflects the lingering rural character of the state.

The structure of state taxing and spending, to a major degree, reflects attitudes and political pressures within the state. Furthermore, it appears that West Virginia's failure to provide the necessary social overhead investment does not reflect inadequate resources, at least at the local level. West Virginia has a limitation on the long-term general obligation debt which counties, cities, and school districts can authorize. The limitation is 5 per cent of the assessed valuation of taxable property. All bond issues must be authorized by vote and must receive approval of at least 60 per cent of those voting.⁴⁷ From FY 1958 to 1966 this last requirement caused the failure of 11 school bond elections in West Virginia. During the same period 23 elections marshalled sufficient support to satisfy the 60 per cent voting requirement.⁴⁸ The other Appalachian states having some form of constitutional debt limitations are Pennsylvania, Kentucky, and Alabama. Although the voting requirement associated with the state property tax limitation amendment has had the effect of reducing social overhead investment in West Virginia, the tax limitation feature of the amendment has not had this effect. A comparison of data from FY's 1950 to 1965 shows that unused bonding capacity has exceeded outstanding bonded debt by at least 70 per cent for all classes of cities and for counties as well as for school districts (see Table 3).

For a discussion of those two organizations see: Kaempter, *op. cit.*, pp. ix-xii; and Carter Goodrich, "The Virginia System of Mixed Enterprise," *Political Science Quarterly*, 44 (July 1949), pp. 355-87.

⁴⁶ Davis, *op. cit.*, p. 105.

⁴⁷ Larry V. Starcher with Carl D. Ekstrom, *Trends in Financing Local Capital Improvements Through General Obligation Bonding in West Virginia Local Government Units* (Morgantown: Office of Research and Development, West Virginia University), State Development Plan, Report No. 18, Sec. 1-5 & 3, Phase 4, September, 1966, p. 102.

⁴⁸ Davis, *op. cit.*, p. 174.

In addition to the strictures placed on debt accumulation in West Virginia, there has been a property tax rate limitation applied to all taxable property in the state. The maximum property tax rate ranges from 0.5 to 2 per cent. However, this ceiling probably has not been an effective deterrent to the raising of local revenues. Although the local property tax rate maximums have been fixed by law, the local assessments were not. And, historically, the appraisals of all forms of property have varied between and within most West Virginia counties. Since 1960, county assessments for all property other than that of public utilities were to be at not less than 50 per cent of appraised value. This 50 per cent assessment was only a minimum (and in addition has not always been adhered to). Thus, a considerable leeway has been left for the county to raise assessments even though the structure of the property tax rates was fixed by law.⁴⁹

It would appear that the local aversion to property taxation is the main impediment to the provision of local services, not the tax limitation restraint. This aversion to taxation reflects the rural nature and attitudes of West Virginians. Antiquated public facilities and inadequate social overhead investments will perhaps continue to hamper the economic development of the central Appalachian region. On the other hand, it is in this area that Area Redevelopment Administration, Economic Development Administration, and Accelerated Public Works spending have made a pronounced impact.⁵⁰

However, the federal subsidies used to expand social overhead investments in West Virginia have not been of the type necessary to induce private investment flows that would alter the industrial structure of the state. The location factors sufficient for this task await the completion of the interstate highway system in the state. Thus, West Virginia remains tied to the bituminous coal mines. Historically, the state's comparative advantage has been in the extractive industries, with the state government being particularly solicitous of the bituminous coal mining interests. The state's tax structure still reflects this attitude. But, a description of the economic inter-industry linkages of the state shows how misguided programs and policies reflecting that dependence can be, if the aim of the state's political leaders is economic development. That is,

⁴⁹ For a short discussion of the property tax system in West Virginia see: Advisory Commission on Intergovernmental Relations, *The Role of the States in Strengthening the Property Tax*, Vol. 2 (Washington: Government Printing Office, June 1963), pp. 169-173.

⁵⁰ Albert O. Hirschman, *The Strategy of Economic Development* (New Haven: Yale University Press, 1958), chap. 6.

Table 3
 PERCENTAGE OF UNUSED BONDING CAPACITY
 OF WEST VIRGINIA POLITICAL SUBDIVISIONS¹
 For Selected Fiscal Years 1951-1966

Fiscal Year	County	County School Units	Cities Class I ²	Cities Class II ³	Cities Class III ⁴	Cities Class IV ⁵
1966	95.1	*	*	*	*	*
1965	97.2	75.1	82.3	89.6	89.7	95.5
1964	87.3	*	*	*	*	*
1963	97.1	*	78.1	84.6	90.3	*
1962	96.6	70.3	*	*	*	*
1961	*	*	74.0	87.9	89.0	*
1960	96.6	66.8	*	*	*	*
1959	*	*	77.2	87.2	92.8	*
1958	*	79.9	*	*	*	*
1957	95.0	74.4	66.6	90.4	92.4	*
1956	*	*	*	*	*	*
1955	*	73.9	66.6	98.5	92.0	*
1954	*	*	*	*	*	*
1953	93.9	85.7	81.7	90.6	90.9	*
1952	*	*	*	*	*	*
1951	*	91.5	77.1	88.9	97.9	*

* Gaps in data.

SOURCE: Larry V. Starcher with Carl D. Ekstrom, *Trends In Financing Local Capital Improvements Through General Obligation Bonding In West Virginia Local Governmental Units*, State Development Plan Report No. 18.

¹ The percentage of unused bonding capacity is a ratio of unused bonding capacity to maximum bonding capacity.

² Class I Cities have populations exceeding 50,000.

³ Class II Cities have populations ranging from 10,000 to 50,000.

⁴ Class III Cities have populations ranging from 2,001 to 10,000.

⁵ Class IV Cities have populations of less than 2,000.

continued dependence on mining is not likely to result in induced investment flows into other West Virginia industries.

III

Industrial Structure of the State

SUMMARY MEASURES of the inter-industry transactions of the West Virginia economy can be based on the forward and backward inter-industry linkages of the state's production and distribution processes. The backward linkage of an industry is simply the ratio of its purchases from other industries (in the same region) to the total output of the industry. Forward linkage is the ratio of inter-industry sales of a particular industry to its total output. From a causal standpoint it can be argued that the backward linkages are the more important of the two relationships because these linkages induce investment and economic activity. Backward linkages reflect the "pressure of demand" and therefore are necessary before

forward linkages can "manifest themselves."⁵¹ However, the backward and forward linkage measures, where regional input-output transactions are concerned, are less stable than their national counterparts.⁵² This arises from the fact that the inter-regional trading patterns may shift over the business cycle as well as in the long-run. Thus, the regional input components of the input-output production function may fluctuate considerably between a recession and an expansionary period if strong inter-regional competitive effects exist for a particular industry.⁵³ The same situation can, of course, exist with regard to an industry's sales to other industries within the same region.

A comparison of the West Virginia industrial structure with that of other selected areas (where input-output tables have been developed) indicates the lack of industrial linkages of the internal structure of the West Virginia economy. Table 4 which compares West Virginia industrial linkages with four other areas and the U.S., shows the extent of this weakness. The industries for which backward and forward linkages were developed represent the most important manufacturing industries comprising the industrial structure of each area. (The industries selected for the U.S. are approximately the same as those representing West Virginia). Since the industrial structure for each area is different, the list of the 10 largest industries is not the same. However, this gives a better explanation of why the overall linkages for the areas are different. The overall geographic linkage shown for each geographic area is simply the sum of industry transactions divided by gross state product and, of the states and areas presented in this analysis, is lowest for West Virginia.

⁵¹ The backward linkage of a particular industry may be defined as the ratio of state inter-industry purchases to the total value of gross product generated by that industry. Such a measure excludes the payments to households (wages and salaries, rents, royalties and profits) as well as taxes paid to the various levels of government. The concept of backward linkage can be broadened by simply developing a value-added—gross state product ratio (for the particular industry). The ratio also validly represents one aspect of backward linkage because it represents payment to the various factors of production. Similarly, backward linkages could be computed for other components of the inter-industry analysis such as saving. However, since saving in the West Virginia input-output model is treated as a residual, it is impossible to determine how much gross savings and property payments move out of the region. A second and related measure is that of forward linkage. Forward linkage is inter-industry sales divided by the gross state production generated in a particular industry. This measure shows to what extent an industry's sales are absorbed by other regional industries. It should be noted that unless the inverse matrix is used in these calculations, the forward (and backward) linkage measure will refer only to direct requirements.

⁵² For discussion of the factors contributing to instability in regional trading patterns see: Leon N. Moses, "The Stability of Inter-regional Trading Patterns and Input-Output Analysis," *American Economic Review*, 45 (December, 1955), pp. 810-12.

West Virginia has the characteristics of a backward region in that the state's inter-industry relations are very weak—particularly with regard to backward linkage. From the standpoint of value added, the most important West Virginia manufacturing and mining industries are organic industrial chemicals, bituminous coal mining (underground), and primary metals. The backward linkage coefficients are 24.4, 9.9, and 9.7 for the three industries, respectively. Although the backward linkage for the chemical industry is fairly high, relative to the chemical industry in other areas, the forward linkages of all three industries are low relative to those registered in other geographic regions of the U.S. Furthermore, the chemical industry is rather weakly linked with the household sector—it is a capital-intensive industry characterized by high wages but also by a high capital-labor ratio. Thus, the payment to households is not high relative to other industries in West Virginia.

Despite the relatively high (for West Virginia) backward linkage of the chemical industry, the import linkage (ratio of inter-regional imports in the production function to gross state product generated by the industry) is 37.1. Thus, the production requirements of the West Virginia chemical industry ties it more closely to other parts of the national economy than to the West Virginia economy. However, a portion of the chemical industry in West Virginia is located along the Ohio River. Therefore, some of the linkages associated with the chemical industry are lost, because the input-output study is limited to the state and does not include the Ohio side of the river which also is heavily industrialized. It should also be noted that the very high forward linkages of crude petroleum and natural gas extraction and refined petroleum products reflect input requirements of the West Virginia organic chemicals industry.

The low backward and forward linkage of the primary metal industry in West Virginia reflects not only a lack of inter-industry attachments to the West Virginia economy, but also the geographic location of the industry within the state—the northern panhandle of the Ohio Valley. In fact, the Wheeling and Weirton areas are probably much more closely linked with Ohio and Pennsylvania than with West Virginia. In all likelihood, the concentration of much of West Virginia's manufacturing industry in the Ohio Valley, along with the poor transportation network within the state, largely precludes an extensive linkage of the Ohio Valley of West Virginia with the interior of the state and the interior of Appalachia.

The underground bituminous coal industry, which provides the largest

industrial payroll of any industry in West Virginia, has the lowest forward and backward linkage of any industry in the state. Although the industrial payroll is high for the underground mining industry, it is not very likely to increase appreciably over time because of continued mechanization of the mines. The resurgence of mining activity in West Virginia since 1960 may cause mining employment to decline less rapidly than in the past, and pay scales will undoubtedly rise in the industry in the future. However, the rapid increase in total gross production will be much greater than increases in wage and salaries.

It is often argued that the mining industry siphons profits out of the state. However, gross saving (a residual item) for the underground mining industry in West Virginia would seem to show that even if the 10 per cent depletion allowance were added to savings, the gross savings ratio was not large for the underground mining industry, relative to some of the other state industries. It would appear that perhaps coal companies were not exporting profit out of the state in 1965 to the same extent as some other industries within the state. For instance, the absolute level of gross savings in the chemical industry is roughly three times as high as in coal mining (about \$159 million), according to the 1965 input-output transactions table. It would seem likely that the chemical industry is repatriating profits from the state to a greater extent than the coal industry.

IV

Conclusion

WEST VIRGINIA'S MAJOR PROBLEMS center around attitudes, not resources. A rural frame of reference has prevented the generation of public investment necessary to bring public facilities in the state up to the standard evident in other parts of the U.S. Until recently, these same attitudes have prevented the institution of constitutional reforms that would facilitate a rational approach toward the budgeting and spending of state funds. However, recently the state budget-making power of the Board of Public Works was abolished, with the Governor now having the authority to prepare the state budget. Thus, attitudes have both directly and indirectly prevented the development of a growth "psychology" within the state. Furthermore, these same attitudes have worked against a vigorous program of interstate highway construction.

West Virginia's procrastination with regard to the interstate highway program has resulted in a large "Appalachian Gap" in the highway system. Until the interstate facilities are completed, the whole Appalachian region

Table 4

LINKAGES DEVELOPED FROM INPUT-OUTPUT TRANSACTION TABLES OF
THE U.S., WEST VIRGINIA AND SELECTED STATES, FOR LEADING
INDUSTRIES IN EACH GEOGRAPHIC AREA ARRAYED IN ORDER OF THEIR
ECONOMIC IMPORTANCE TO EACH AREA*

Rank	Area and industry	Backward Linkage	Import Linkage	Forward Linkage
UNITED STATES ¹				
1	Chemicals	61.4	2.6	84.7
2	Coal	41.7	0.1	77.0
3	Primary metal products	64.4	3.7	96.1
4	Glass	44.5	2.1	91.2
5	Transportation equipment	64.4	1.6	40.2
6	Stone and clay products	51.7	1.2	95.4
7	Agriculture	58.1	2.0	83.4
8	Fabricated metal products	59.7	0.6	89.1
9	Electrical machinery	54.9	0.5	53.4
10	Machinery, except electrical	55.6	1.1	47.0
WEST VIRGINIA ²				
		9.1	15.0	9.1
1	Chemicals	24.4	37.1	16.5
2	Coal	9.9	34.9	33.9
3	Primary metal products	9.7	56.9	6.8
4	Glass	18.7	22.7	4.4
5	Transportation equipment	13.0	48.7	1.5
6	Stone and clay products	24.7	26.4	28.8
7	Agriculture	25.4	28.8	33.9
8	Fabricated metal products	16.0	42.9	29.3
9	Electrical machinery	31.6	25.1	3.4
10	Machinery, except electrical	15.6	44.0	6.1
WASHINGTON ³				
		11.3	9.3	11.3
1	Aerospace	5.2	42.8	1.3
2	Lumber and wood products	47.5	8.5	45.3
3	Paper and allied products	31.8	19.4	19.5
4	Chemicals and petroleum products	10.4	40.4	24.7
5	Nonferrous metals	13.5	50.8	7.6
6	Canning, preserving and beverages	47.3	12.3	4.1
7	Meat and dairy products	64.3	15.0	10.4
8	Transportation, other than aerospace	20.4	30.9	1.5
9	Grain mills	41.2	24.8	24.3
10	Field and seed crops	18.9	27.2	26.0
UTAH ⁴				
		21.4	16.6	21.4
1	Agriculture	54.2	3.9	66.3
2	Food products	65.8	15.0	32.1
3	Nonferrous metals	82.3	8.5	1.2
4	Copper mining	13.9	10.7	100.0
5	Iron and steel	58.4	13.9	43.4
6	Petroleum products	21.2	56.4	53.0
7	Coal mining	0.1	13.8	54.2

8	Mining, other than lead and zinc	19.1	17.6	59.0
9	Lead and zinc mining	15.3	14.3	55.3
10	Printing and publishing	15.1	27.4	64.2
	MISSISSIPPI ⁵	21.2		21.2
1	Cotton	36.3	—	15.6
2	Apparel	54.8	—	0.2
3	Mining	22.8	—	35.6
4	Logging, saw mills & planing mills	56.2	—	67.6
5	Meat packing	83.1	—	1.7
6	Forests and other agriculture products	41.6	—	84.9
7	Electrical machinery	5.2	—	50.9
8	Transportation equipment	5.5	—	15.1
9	Dairy farms	8.3	—	62.3
10	Poultry processing	8.1	—	2.2
	ST. LOUIS ⁶	15.1	19.9	15.1
1	Food and kindred products	16.0	54.0	35.2
2	Products of petroleum and coal	13.6	71.6	26.8
3	Motor vehicles	31.3	47.7	57.9
4	Chemicals	16.0	50.7	15.0
5	Miscellaneous manufacturing	32.3	24.5	60.5
6	Transportation equipment, other than motor	9.2	52.6	3.3
7	Iron and steel	22.0	32.8	37.1
8	Machinery, except electrical	26.6	33.1	51.4
9	Fabricated metal products	20.4	39.3	63.7
10	Electrical machinery	21.2	32.0	17.7

* Only the manufacturing sector was considered in this analysis. The array of industries shown for the U. S. are those industries which were important in West Virginia.

¹ National Economics Division Staff, "The Transaction Table of the 1958 Input-Output Study and Revised Direct and Total Requirements Data," *Survey of Current Business*, U. S. Department of Commerce, (September 1965), Table 1, pp. 33-39. No aggregate linkages were computed for the Nation because of the desperate size of the "economic" area involved.

² John H. Chapman, Jr. and Kenneth L. Shellhammer, *The Structure of the West Virginia Economy, 1965: A Preliminary Report*, Regional Research Institute, West Virginia University, (November 1967), Table 1.

³ Charles M. Tiebout, "An Empirical Regional Input-Output Projection Model," an unpublished paper presented at the *Proceedings of the Southern Economic Association*, November 1967). The transaction table was based on 1965 data.

⁴ Frederick T. Moore and James W. Peterson, "Regional Analysis: An Interindustry Model of Utah," *Review of Economics and Statistics*, 37 (November 1955), Table 1. The transactions table was based on 1947 data, and also partially utilized national coefficients. The national coefficients were taken from D. Evans and M. Hoffenberg, "The Interindustry Relations Study for 1947," *Review of Economics and Statistics*, 34 (May 1952).

⁵ John G. D. Carden and F. B. Whittington, Jr., *Studies in the Economic Structure of the State of Mississippi*, Vol. 1, Mississippi Industrial and Technological Research Commission, Table 1.

⁶ John C. Bollens, *Exploring the Metropolitan Community* (Berkeley: University of California Press, 1961), Appendix F, Table F1. The data were for 1955.

will suffer from a lack of intra-connectivity and will not furnish the transportation requirements necessary for a healthy industrial structure in the region. Until this situation is improved, the regional spread effects associated with national growth will be slow to develop in Appalachia.

If economic development is to come to West Virginia and Appalachia, it is likely to be the result of external economic and political forces. The governmental and fiscal structure of the state—committed as it is to its rural constituents—is not likely to be altered as a result of existing internal forces. But the interstate highway program constitutes a major political and, when completed, technological force that will have developmental consequences for the state. Just as the secular meaning of investment has been productivity increases, which have been directly related to changes in the composition of final demand and in processes of distribution, the introduction of a new transportation system involves changing patterns of industrial location factors for the regions making up the national economy.

However, the eventual completion of the interstate system will result in increasing private investment flows into West Virginia and in the establishment of new manufacturing branch plants in the state. Extensive investment flows in the coal industry are already taking place. But these are in no way tied to the highway system. The net effect of this new investment will force the adoption of higher levels of spending for government services in the state and hopefully an improvement in the quality of those services—insofar as a large proportion of state and local spending (education, utilities, and public facilities) is complementary to private investment, this must occur. The state will be forced to provide more services just as the state was forced to tax itself in 1967 and 1968 in order that funds could be obligated for the interstate system so West Virginia's apportionment would not lapse.

The most unfortunate aspect of West Virginia's development since 1960 has been the failure of the state authorities to act promptly on the highway program—a situation that was partially reflective of a generous period of grace: the two years that states have after initial apportionment to obligate their share of the interstate highway funds. The failure to move forward with the West Virginia highway program has played a strong part in propagating the industrial weakness not only of West Virginia but of the whole Appalachian region.

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The Strike in a Laissez-Faire Society

A Libertarian View of Labor's Ultimate Strategy

By ROBERT V. ANDELSON

I

The Strike: Theoretical Observations

OVER THE PAST SEVERAL DECADES, organized labor in the United States has more and more come to reject the voluntaristic approach epitomized (although not consistently) by Samuel Gompers, chiefly because of the conviction that the cards are stacked against the union in an economic milieu not ordered by the State. Despite the demand for free collective bargaining, little faith in its efficacy has been displayed. Instead, labor has increasingly mobilized politically to bring about positive legislation regarded as favorable to its interests.

Apologists for this phenomenon cite numerous historical examples to justify their argument that labor was hopelessly outmatched so long as it confined itself to purely economic techniques to gain its ends. The failure of most important American strikes in the years prior to the passage of the Wagner Act would seem, superficially, to validate this contention. Yet what is often overlooked is the fact that these strikes did not occur in a context of laissez-faire. They were not, for the most part, broken because of any natural superiority of strength on the part of capital. They were mainly broken because of government intervention which made for a pattern of artificial inequality; especially by the use of the injunction for purposes other than the protection of personal freedom, property rights, and the public peace.¹ The Wagner Act merely reversed the tables, substituting one kind of favoritism for another. While this may have been in a sense temporarily justified in order to "even things up," such justification has long since vanished. The Taft-Hartley Law represents a slightly more equitable balance within the structure of intervention, but the justice and necessity of intervention remain unquestioned. Laissez-faire has this, if nothing else, in common with Christianity: both are widely believed to have failed; actually, neither has been given a real try.

Would organized labor really be impotent if laissez-faire prevailed? In attempting to answer this question, I begin with a double premise the truth of which many libertarians are reluctant to concede, namely, that

¹ See numerous cases cited in Felix Frankfurter and Nathan Greene, *The Labor Injunction* (New York: Macmillan, 1930), *passim*.

collective bargaining and the strike are not, in essence, incompatible with a voluntaristic society. I shall therefore discuss this premise before proceeding to the question proper.

In order to forestall misunderstanding, it might be well for me to emphasize that nothing in this essay should be construed as assuming that the interests of labor and of capital need be viewed as antithetical. What Marxists call the class struggle really is simply a reflection of the all-too-frequent failure of both elements to perceive their mutuality of interest: the failure of workers to realize that capital is but "stored-up labor," the failure of management to realize that it is actually labor which hires capital, and the failure of both to realize that were it not for monopolies traceable to government there would be a larger economic pie for them to share between them. Properly understood, neither the free labor market nor any other free market can be an arena for the clash of interests, for a market is by definition a mechanism whereby areas of reciprocal satisfaction are discovered and given contractual expression. While such expression may not be *wholly* acceptable to each party to an agreement, it constitutes that which is *mutually* acceptable within a framework of supply and demand. The free market is thus the only mechanism for the exchange of goods and services which is appropriate to free men who respect one another's freedom.

No doubt the foregoing will appear naive to one who has considered that the parties to an exchange not infrequently include vast corporate entities possessing the advantages of pooled resources and sophisticated organization. The superior bargaining position engendered by these advantages creates a presumptive disparity of satisfaction in favor of corporate entities within the area of mutual agreement arrived at when they contract with isolated individuals. Capital, if corporate, can generally be the more readily withheld from those unwilling to hire it on its own terms. In other words, the corporate entity has a greater market leverage due to its superior ability to control supply. Therefore labor may find it necessary to become corporate also, so as to achieve an equality of bargaining power by a capacity for effective refusal to employ capital except on terms more agreeable to itself. The negotiating in the market is not obstructed by such factors; it has simply become on both sides a negotiating between individuals in combination rather than in isolation.

One way of defining a strike is as the concerted withdrawal of demand for capital, used as a bargaining lever by labor. The collective cessation of work, when it does not occur in violation of contractual agreements honored by the other side, constitutes a perfectly natural and legitimate

labor strategy. From a libertarian standpoint, the use of political means (which inevitably imply ultimate physical coercion) for the attainment of labor's economic objectives is actually nothing other than a subtle (and sometimes not-so-subtle) mode of armed robbery, a predatory interference with the market, an abuse of the police power to implement privilege at the expense of the principle of voluntary contract. The same cannot be said of the strike, which is, at least in theory, merely the organized refusal to employ capital, or, from another frame of reference, the organized withholding by the workers of their labor, a commodity which indubitably belongs to them.² In short, the right to strike is an aspect of the right to private property.

II

Coercion and the Right to Strike

WHEN I SPEAK of the strike as a legitimate instrument, and of the right to strike as an aspect of the right to private property, I assume, of course, that it is peaceful. Legitimacy does not obtain where workers who decline to strike are physically intimidated, where customers are subjected to harassment, where private property is usurped as in a sit-down, or where the strikers resort to sabotage.

V. Orval Watts insists that

a successful strike without coercion is like a two-headed cow. One can't say it never happened. One hears of strikes that begin peacefully, just as one hears or reads now and then of a two-headed calf. But the rule is that a calf or cow has one head, and that a strike is won only by some use of violence and intimidation. . . .³

He quotes a famous Harvard economist of past years (not specified but probably Thomas Nixon Carver), as having told a group of graduate students:

I never knew a case in which strikers won their demands without use or threat of violence in one or more of the following ways: to force workers to join the union beforehand, to force them out in strike or to keep them on strike, to keep the employer from hiring strikebreakers, or to scare off his customers.⁴

Watts points out that this violence often takes such forms that the public

² While the laborer is himself, of course, no commodity, labor is *the* commodity par excellence. (Quotation of the *ibid.*, pp. 9-10). Were this not so, the proletarian would truly be a pauper, for he would have nothing whatsoever to exchange. See Ludwig von Mises, *Human Action* (New Haven: Yale University Press, 1949), p. 629.

³ V. Orval Watts, *Union Monopoly* (Los Angeles: The Foundation for Social Research, 1954), pp. 19-20.

⁴ *Ibid.*, p. 14.

is not aware of it—injurious and destructive acts which cannot be proved to be other than accidental, threats which are not resisted and therefore never come to light, use of the police power to maintain "order" by forcing management to accede to union demands or by stripping it of any means of counter-pressure.

That these lamentable practices not infrequently characterize strikes cannot be denied. But that coercion is a *normative* aspect of the victorious strike is a contention which lies outside the realm of conclusive empirical demonstration, for (1) coercion cannot be assumed merely because it often exists in forms for which no concrete evidence can be adduced, and (2) as Watts himself admits, "there is no way to isolate definitely or precisely the effects of coercive unionism from the effects of voluntary unionism."⁵ Even if it could be shown that some physical intimidation accompanies virtually all strikes, this would be a long way from proving that their successful outcome depends upon it.

It is true that wherever labor supply exceeds demand, the market creates the presumption that a successful strike cannot be waged without coercion, for strikers must resort to force to insure that the jobs they vacate are not filled by others who are willing to accept work on inferior terms. But where labor is in short supply, the opposite presumption holds. Of course, it might be said that when this is the case there is no need to strike, for management will voluntarily provide adequate inducements to attract workers and persuade them to stay on the job. Yet management collusion may temporarily keep inducements artificially low, although such collusion cannot be long sustained. And management may be tardy in comprehending the limits of the available supply of labor, and hence remiss in providing satisfactory inducements until given strong evidence of the necessity for so doing. Thus where demand for labor exceeds supply, a strike may be a peaceful yet potent instrument which militates against delay in the optimum effectuation of labor's favorable position in the market.

The right to private property, it must be noted, belongs to the capitalist as well as to the worker. This raises grave questions as to the equity of restrictions pertaining to business monopoly resulting solely from size or mutual agreement (as distinguished from monopoly *owned and/or given* special protection by government), not to mention legislation prohibiting the lockout, the blacklist, the "yellow dog contract," and like devices formerly used by capital in circumstances of industrial conflict. As long as capital is forbidden to combine in restraint of trade, common justice de-

⁵ *Ibid.*, p. 36.

mands that similar combination on the part of labor be forbidden too. That business monopoly based solely upon combination be subjected to legal strictures from which labor monopoly so based is expressly exempted, obviously contradicts the ideal of equality before the law.

Strictly speaking, the empirical consequences of monopoly lie outside the purview of libertarian ethics, which are concerned only with the question of whether or not a given monopoly is coercively grounded and/or maintained. In this connection, however, it may be apposite to stress a point to which I have already alluded briefly, namely, the inability of monopoly to sustain itself when grounded exclusively upon agreement. Sooner or later, if demand be great enough, some party to the agreement will see a greater opportunity for profit by meeting the demand competitively, or someone not included in the agreement will enter the market by producing a competitive supply. If they are bought off or brought into the agreement, others will arise to take their place. The market itself will regulate artificial monopoly in a state of laissez-faire. Nor can possession of a natural monopoly, however gained, be secured for any length of time without political assistance. One need only turn to Gustavus Myers' *History of the Great American Fortunes*⁶ to perceive that monopolistic concentration of wealth may almost invariably be laid at the door of government intervention, not of laissez-faire. In an incisive, privately-distributed analysis of this influential book, Edmund A. Optiz demonstrates that every evil its Socialist author deplores is due to a misapplication of government power in the form of special privileges such as franchises, land grants, exclusive banking rights, tariff advantages, and the like.

The continuous intervention of political power in the market place to enrich some at the expense of others is referred to scores of times in the book, but Myers does not assess this political activity for what it is worth. Those who thus misuse political power, Myers calls "capitalists." Actually, the context indicates that when he uses the word 'capitalist' he means 'plunderer.' If one goes through the book substituting the word 'plunderer' for the word 'capitalist' wherever the latter occurs, the book is a fascinating account of the looting which took place on this continent with the active or passive connivance of government.⁷

Karl Marx's treatment of the Enclosure Movement toward the end of *Capital* may be similarly analyzed.⁸ In fact the Marxist indictment of

⁶ Gustavus Myers, *The History of the Great American Fortunes* (Chicago: Charles H. Kerr, 1909).

⁷ Edmund A. Optiz, private memorandum, 1953.

⁸ Karl Marx, *Capital* (Chicago: Charles H. Kerr, 1906), Part VIII, Chaps. 27, 28.

laissez-faire is a logical absurdity in the light of Marx's doctrine of the State as an instrument of class oppression.

III

The General Strike: Empirical Analysis

IN 1961, IN ORDER to be able to assess inductively the claim that labor is powerless to attain its ends without political assistance, I made a detailed study of the history of the general strike. The general strike was chosen because it is labor's most ultimate and total means of pressure, and at the same time, the most difficult to wield successfully. If it can be shown to have been used effectively even in a relatively few instances, the argument is refuted that organized labor's aims cannot be met without the aid of political intervention. This is to assume, of course, that where no clear evidence to the contrary exists, physical coercion is not the decisive causal factor in a strike's success.⁹

Although my inquiry doubtless fell short of being exhaustive, it did try to take account of every recorded general strike from that led by Richard Pilling in England in 1842 to that directed against President Balaguer in the Dominican Republic in 1961. As one might expect, many of the cases were complex, involving multiple causes and results, the latter occasionally contradictory. Furthermore, the available data were often sketchy. Hence, in classifying a given strike, despite my conscious effort to avoid arbitrary judgments, I may have sometimes erred in the weight which I assigned to various factors. Nonetheless, while I certainly do not claim infallibility for my conclusions, I feel that they are broadly accurate and cumulatively significant.

Wilfred H. Crook suggests what I consider a good working definition of a general strike: its essential test is that it be aimed at "the complete or near paralysis of the economic life of the community, whether a city or nation, in order to achieve certain ends desired by the strikers."¹⁰ Following "Mermeix" (Gabriel Terrail), he distinguishes between the *economic* general strike, which seeks to redress specific economic grievances,

⁹ My study was in part based on Wilfred H. Crook's massive volume, *The General Strike: Labor's Tough Weapon* (Chapel Hill: University of North Carolina Press, 1951), the definitive history of the subject through 1951. Just as I was preparing to submit my monograph for publication, I was delighted to discover that much of the original research which it embodied had been rendered superfluous by the appearance the previous year of a new book by Crook, who after a lapse of almost three decades had again addressed his attention to the topic in question, bringing his survey up to date with the aid of a grant from the Social Science Research Council. This work was published under the somewhat misleading title, *Communism and the General Strike* (Hamden, Conn.: Shoe String Press, 1960).

¹⁰ Crook, *Communism and the General Strike*, *ibid.*, p. 329.

or bring about advances in industrial life; the *political* general strike, invoked for some political end such as extension of suffrage, change of ministry, or nullification of a *coup*; and the *revolutionary* general strike, which envisages the overturning of the entire politico-economic order.¹¹

Any of these three types may be converted while in process into one of the other two. Although this typology has been criticized as "incomplete and of doubtful value,"¹² I do not find the criticism convincing, since the additional categories proposed by the critic (*e.g.*, ethnic and anticolonial strikes) may be roughly subsumed under Crook's tripartite division. It should be noted that many general strikes, especially those classified as political, have not been distinctively working-class in either instigation, participation or objectives, yet this in no sense militates against their usefulness as examples in view of the problem to which my study was directed.

Of the 29 general strikes which I evaluated as having been by and large successful, only seven appeared to include violence sufficient to be considered a major factor in their outcome.¹³ These we may exclude, leaving 22 general strikes adjudged both successful and primarily peaceful. Twelve of these were basically political; eight, economic; and two, revolutionary.¹⁴

The various pragmatic arguments by labor against the general strike principle may be summed up under two objections: first, that the strike is bound to fail; and second, that even if it should succeed, its triumph can only be illusory. Speaking at the French Socialist Congress held at Limoges in 1906, Jules Guèsde set forth the latter objection in the following terms:

Trade union action moves within the circle of capitalism without breaking through it. . . . Even when a strike is triumphant, the day after the strike the wage earners remain wage earners and capitalist exploitation continues. . . . Supposing that the strikers were masters of the streets and should seize the factories, would not the factories still remain private property? . . . The owners of the property will have changed, the system of ownership will have remained the same.¹⁵

¹¹ *Ibid.*, pp. 7-8.

¹² Horace B. Davis, "A Bibliographic Essay: The General Strike is No Myth," *Southwestern Social Science Quarterly*, June, 1962, p. 59.

¹³ Russia, January, 1905; Uruguay, 1918; Argentina, 1919; Shanghai, 1925; Cuba, 1933-4; Argentina, 1945; and Venezuela, 1958.

¹⁴ Political: Lithuania, 1918; Czechoslovakia, 1918; Colombia, 1944; Denmark, 1944; Belgium, 1950; Haiti, 1956; Haiti, 1957; Venezuela, 1958; Cuba, 1958; Dominican Republic, 1961. Economic: Sweden, 1902; Cuba, 1943; Lancaster, Pa., 1946; Bolivia, 1950; Iceland, 1952; Calcutta, 1952; Chile, 1955; Finland, 1956. Revolutionary: Russia, November, 1905; Russia, March, 1917.

¹⁵ Quoted in Robert Hunter, *Violence and the Labor Movement* (New York: Macmillan, 1914), p. 269.

What this really amounts to is merely a doctrinal attack upon Syndicalism as incompatible with the goals of orthodox Marxism. In order to regard it as a meaningful assault upon the general strike principle as such, one must first accept the premise that private property is evil and should be abolished.

A charge more comprehensive in its significance is that of Jean Jaurès: If the proletarians take possession of the mine and the factory, it will be a perfectly fictitious ownership. They will be embracing a corpse, for the mines and the factories will be no better than dead bodies while economic circulation is suspended and production is stopped.¹⁶

Yet this argument, like the other, is limited in its application, for it too assumes a revolutionary strike. The goals of the economic general strike envisage no expropriation of the industrial machinery, and, if rationally conceived, do not call into question the capitalist's right to profit on his investment. In this context, therefore, the interests of capital no less than of labor will tend to dictate settlement before the mines and factories are reduced to "corpses." This is not to deny, of course, that settlement may be often frustrated by factual misconceptions and non-economic motives.

Some commentators maintain that an inner logic necessitates the transformation of an economic general strike into a violent revolutionary one if it is not to end in failure. Zinoviev, then president of the Executive Committee of the Third Internationale, stated the Soviet position in an open letter written in 1920 to the Industrial Workers of the World:

History clearly indicates that the general strike is not enough. The capitalists have arms. . . . Moreover, the capitalists possess stores of food, which enable them to hold out longer than the workers, always on the verge of actual want. The Communists also advocate the general strike, but they add that it must turn into ARMED INSURRECTION.¹⁷

Although no partisan of violence, Robert Hunter also argues the impossibility of the peaceful general strike:

While it is true that many Syndicalists believe that the general strike may be solely a peaceable abstention from work, most of them are convinced that such a strike would surely meet with defeat. . . . If "the capitalist class is to be locked out" . . . one must conclude that the workers intend in some manner without the use of public powers to gain control of the tools of production. In any case, in order to achieve any possible success, they will be forced to take the factories, the mines, and the mills and to put the work of production into the hands of the masses. If the State interferes, as it undoubtedly will in the most vigorous manner, the

¹⁶ *Ibid.*, p. 270.

¹⁷ Quoted by Nesta H. Webster, *The Socialist Network* (London: Boswell, 1926), p. 75.

strikers will be forced to fight the State. In other words, the general strike will necessarily become an insurrection. . . .¹⁸

Yet many a general strike has been waged with no intention of "locking out the capitalist class," or gaining control of the tools of production. And the witness of history, my research suggests, testifies to the substantial success of at least eight essentially peaceful economic general strikes up through the time I made my study: Sweden in 1902, Cuba in 1943, Lancaster, Pa., in 1946, Bolivia in 1950, Iceland in 1952, Calcutta in 1952, Chile in 1955, and Finland in 1956.

IV

The Future of the General Strike

HUNTER IS UNEQUIVOCAL in his assertion that the revolutionary general strike is bound to fail:

It is urged that labor alone is absolutely necessary to production and that if, in a great general strike, it should cease production, the whole of society would be forced to capitulate. And in theory this seems unassailable, but actually it has no force whatever. In the first place, this economic power does not exist unless the workers are organized and are practically unanimous in their action. Furthermore, the economic position of the workers is one of utter helplessness at the time of a universal strike, in that they cannot feed themselves. As they are the nearest of all classes to starvation, they will be the first to suffer by a stoppage of work. . . . The individual worker has no economic power, nor has the minority, and it may even be questioned if the withdrawal of all the organized workers could bring society to its knees. Multitudes of the small propertied classes, of farmers, of police, of militiamen and of others would immediately rush to the defense of society in the time of such peril. It is only the working classes theoretically conceived of as a conscious unit and as practically unanimous in its revolutionary aims, in its methods, and in its revolt which can be considered as the ultimate economic power of modern society. The day of such a conscious and enlightened solidarity is, however, so far distant that the syndicalism which it is based upon falls of itself into a fantastic dream.¹⁹

This analysis may be accepted if one apprehends that it applies only to the *proletarian* revolutionary strike. Unless the 1945 Peronista general strike can be regarded as truly revolutionary, which is a bit questionable, no revolutionary *class* strike has ever been successful, and the Peronista strikers depended upon physical coercion to an appreciable degree. The Russian revolutionary strikes of October, 1905, and March, 1917, were not class actions but spontaneous national movements which

¹⁸ Hunter, *op. cit.*, p. 246.

¹⁹ *Ibid.*, pp. 274-75.

cut across class lines. While they did involve some violence, in the light of their broad popular support it can scarcely be regarded as a definitive factor. In 1905, for instance, the "small propertied classes, farmers, police, militiamen," etc., joined the strike instead of seeking to thwart it. In fact, the mass walkout even extended to judges and other high officials of the Tsar's bureaucracy!²⁰ Only the Bolshevik insurrection against Kerensky's Provisional Government was strictly a class uprising, and it was not primarily a strike.

The political general strike was discussed in a report by the Social Democratic Party of Holland at the Amsterdam Congress of the Second Internationale in 1904: "The political general strike is a dangerous method, but Belgium and Sweden have shown that dangerous is not exactly synonymous with harmful, even when it has no direct result."²¹ Two years later, at the suggestion of Karl Kautsky, the author of this report, Henriette Roland-Holst, wrote an exhaustive treatise on the conditions necessary for the success of the corporative (economic) general strike.²² In it, she holds that because certain political results inevitably accompany the corporative general strike, there is need for political organization of the workers combined in united action with the unions. But within the purview of this study it needs only to be remarked that in the context of a libertarian social order there would be no occasion for political results to accompany the corporative general strike, so long as it remained pacific.

Sorel quotes Sidney Webb as stigmatizing the general strike as an illusion of youth, and asserts that "it is the opinion of the Socialist-sociologists, as also of the politicians, that the general strike is a popular dream, characteristic of the beginning of the workingclass movement. . . ."²³ Yet no less a Socialist-sociologist-politician than Eduard Bernstein announced in 1905, at a conference at Breslau, that with regard to gaining political rights, "the time had passed for the use of barricades, but the economic life was now so complex that a new means was at the disposal of the workers—the large scale strike."²⁴ And J. Ramsay MacDonald, while opposed to the revolutionary strike, said with reference to the political and to the corporate general strike: "As a last resort, as a *coup de grâce*, it

²⁰ *New York Times*, July 15, 1934, p. 16.

²¹ In Hubert Lagardelle (ed.), *La grève générale et le Socialisme* (Paris: Cornely, 1905), pp. 390–400.

²² *Generalstreik und Sozialdemokratie* (Dresden: Kaden, 1906).

²³ Georges Sorel, *Reflections on Violence*, trans. T. E. Hulme (London: Allen and Unwin, 1916), p. 132.

²⁴ Crook, *The General Strike: Labor's Tragic Weapon*, op. cit., p. 202.

may be justifiable, and need not be unsuccessful."²⁵

Crook summarizes his conclusions in a statement which has been impressively validated by the course of events over the decades since it was written:

To hope for success the leaders of a general strike must make the aim simple, clear to all, and as far as possible one that will not isolate the striking proletariat completely from all the remaining groups in society. For that reason a political mass strike for such a demand as universal suffrage is more likely to gain its end than an economic general strike with demands such as an increase in wages for certain groups of workers. The definite class strike of a revolutionary character, with the aim of superseding the present form of society, will rouse all the latent antagonism and powers of resistance of the non-proletarian classes, and under any normally conceivable situation in the western nations seems to be condemned to failure from the very start. . . .

. . . Admitting all the uncertainty of success attached even to the best-led and most carefully organized mass strike; admitting, too, the most probable reaction that is likely to occur in legislation or in industry, where organized labor carries the strike to the point of self-exhaustion; there still remains the fact that, under certain circumstances of entrenched reaction, the mass strike may well be the sole effective weapon in the hands of organized labor.²⁶

It is true that fewer economic than political general strikes have turned out favorably for those whose hopes relied upon them, but as we examine the roster the reason becomes clear: most were defeated by unrealistic and unsophisticated tactics on the part of the strikers. Gross mismanagement and poor timing marked the British strikes of 1842 and 1926, and the Seattle strike of 1919. After all the original demands had been granted, the Dutch strike of 1903 failed because of reckless greed which alienated the public. Foolish disregard of public sentiment also brought about the collapse of the Swedish strike of 1909 and the San Francisco strike of 1934. As for the French strikes, despite the bluster of their leaders, with the exception of that of 1934, they have been characterized by an almost ludicrous absence of solidarity. Other economic general strikes, such as those which hit Winnipeg, were crushed by the intrusion of the police power.

Such intrusion would be precluded by libertarian conditions. The other reasons for defeat could be overcome by attitudes and assets which tend to characterize organization in its more mature stages of development: a long and carefully analyzed history of experience upon which to draw,

²⁵ J. Ramsay MacDonald, *Syndicalism, a Critical Examination* (London: Constable, 1912), p. 61.

²⁶ Crook, *The General Strike: Labor's Tragic Weapon*, *op. cit.*, pp. 228-29.

pragmatic goals increasingly defined by empirical research delineating with some degree of precision the probable consequences of alternative modes of action, a shrewd and comprehensive program of public relations, the routinization and refinement of organizational technique, and the accumulation of potent material resources. The paradox of the general strike is that usually it has been hailed as a panacea in just those quarters where these factors are most wanting, and its chances of victory therefore faintest. Yet its use abroad has become almost commonplace in recent years, and has in a number of cases proved effective.

The increased incidence of the general strike abroad has not been reflected by any corresponding disposition to use it in the United States, where it would stand perhaps its strongest chance of victory due to the presence of massive and sophisticated unions possessed of vast reserve funds. American labor's reluctance to employ this method is less the fruit of moderation or public spirit on its part than of its capacity, through political lobbying, to gain its ends without risking its assets.

The recent New York City transit strike and nationwide airline strike, however, may be taken as tokens that it remains a latent possibility which, if actualized, would by no means be ineffectual. This is further attested by James R. Hoffa's considered opinion—before his imprisonment—that he could, at will, substantially halt trucking all across the nation by striking six strategic terminal cities. According to the authors of *Hoffa and the Teamsters*,²⁷ he was unlikely to test this plan, but, as John Chamberlain remarks, "this is just another way of saying that Hoffa will get what he wants anyway."²⁸

One might raise the question as to whether the impact of automation might someday render the general strike obsolete as a viable potential instrument of working-class pressure under a libertarian or any other social system. A negative answer is suggested by the ease whereby a relative handful of dissidents in an automated society could short-circuit an entire complex of vital mechanisms by stopping the operation of a single cog. Yet on the other hand, full-scale automation, by shifting demand from ordinary labor to professional and semi-professional technicians and service personnel, might well make the working class, at least as now commonly conceived, itself obsolete. These speculations, however, must be deferred for future investigation.

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²⁷ Ralph and Estelle James, *Hoffa and the Teamsters: a Study of Union Power*, (Princeton, N.J.: Van Nostrand, 1965).

²⁸ John Chamberlain, "King of the Road," *The Freeman*, April, 1966, p. 57.

Slavery and Saving

By ARCHER JONES and ROBERT J. CARLSSON

SINCE THE RECRUDESCENCE OF INTEREST in the economics of slavery as it existed in the Ante-Bellum South, there has been extensive debate concerning the profitability of slavery and its influence on the economic development of the South. The pioneering work of Conrad and Meyer¹ was addressed to the question of profitability which in turn triggered the current controversy over the question of growth and development of the Southern economy. Curiously little attention either on the empirical or theoretical level has been focused upon one of the determinants of the rate of economic progress, namely the ratio of saving to income. A notable exception has been the work of Professor J. E. Moes.² Moes concluded on theoretical grounds that there were factors inherent in the capitalization of the slave labor force that tended to reduce the saving ratio in the Ante-Bellum South *vis-a-vis* the free society of the North. In this article the authors suggest some realistic qualifications and modifications of Moes' theory. We conclude that Moes had deduced the results for a special case only and that on *a priori* grounds there is no reason to believe that in general the saving ratio in the slave society was lower than in the free. Furthermore, the authors take issue with Moes' generalizations with regard to the rate of economic progress in the South.

I

WE ADDRESS OURSELVES to the last point first. Moes concluded that capitalization of the labor force in a slave society, resulting in a lower saving ratio, would in itself have a detrimental effect on economic growth. He qualified this conclusion by suggesting that it depended on the extent to which the labor force was enslaved and on the extent to which the slave society was dependent upon its own capital resources. Applying this conclusion to the situation in the Ante-Bellum South, Moes further concluded that since outside capital flowed into this region, there would be no reason to suspect that development in the South lagged behind the North. Furthermore, Moes stated that the only fact supporting the lagged development argument in the South with which he was familiar was that there was little industry. He discounted this argument by citing the apparent

¹ Alfred H. Conrad and John R. Meyer, "The Economics of Slavery in the Ante-Bellum South," *Journal of Political Economy*, April, 1958, pp. 95-130.

² J. E. Moes, "Absorption of Capital in Slave Labor in the Ante-Bellum South and Economic Growth," *American Journal of Economics and Sociology*, October, 1961, pp. 535-41.

comparative advantage of staple agricultural crops in the South and claimed that the predominance of agriculture was in itself no ground for ascribing economic backwardness to the region.

The authors contend that Moes' conclusions with regard to the rate of economic progress in the South *vis-a-vis* that of the North are superficial and misleading. The rate of growth of any economy depends on the saving ratio, the rate of increase of resources and their productivities, and technological change. Without taking all these factors into consideration, it is not possible to draw any meaningful conclusions regarding the rate of economic growth. His assertion that outside capital flowed into the South means little unless its amount and quality are known. His assertion that the South had a comparative advantage in staple agricultural crops also has little meaning with regard to the relative rates of development of the South and North. All comparative advantage means is that the South was economically better off by concentrating on staple agricultural crops. Although both parties may gain from trade, one party may gain relatively more than the other, and there is no reason to believe that both regions will grow at the same rate. It is not possible to conclude that the North grew faster than the South or *vice-versa* unless *all* the factors which determine the economic growth are considered; that is, the discussion must proceed within the context of a complete growth model. Yet Moes neglected to do this. Although at this juncture the authors are not prepared to develop a complete growth model for the Ante-Bellum South and the North, we do feel that the shortcomings of Moes' conclusions regarding the relative rates of growth of the two regions should be aired. We leave the construction of complete growth models as subjects for future research. Instead, in the remainder of this article we confine ourselves to Moes' analysis and conclusions regarding the influence of slave holdings on the saving ratio.

II

MOES ASSUMED that the slave owner's saving function contained a wealth variable, namely, the owner's holdings of slaves. When the owner cares for slave children and encourages further natural increase of his slave holding, he increases his stock of capital. The behavioral implication is that this in turn satisfies his desire to save. On the other hand, in the free society, according to Moes, parents regard their children as durable consumption goods, the accumulation of which does not satisfy the desire to save. Moes suggests that the expenditures on children in each society add to the labor force and to the stock of human capital; the only difference

being that in the slave society these expenditures satisfy the desire to save and in the free society they do not. Although this argument may contain elements of truth, it requires amplification and is at best subject to strong qualifications.

A first qualification of this argument is that the assumption that the free society in the North did not regard children as assets may not be as realistic as Moes would have us believe. It can be argued plausibly that in free society agricultural situations children were regarded as assets. They were eventual additions to the labor supply, represented future increases in family income (until they left the farm), and hence, also satisfied to a degree the propensity to save. Agriculture provides only one case. Most likely, children were regarded as assets in certain other situations, especially during the era of the mill town. Mining would provide another relevant illustration. Even if children were regarded as durable consumption goods, it seems plausible to assume that holdings of durable goods also affect the saving function. Thus, increases in holdings of durable goods may to some extent satisfy the propensity to save, though probably not to the degree that income producing assets would.

A second qualification refers to possible greater consumption on the part of children in the free society. It is assumed for simplicity that the slave owner is interested only in unskilled slaves, though the analysis will hold for any particular desired level of skill. If the slaveowner is economically rational, he will spend only that minimum amount necessary to insure that his slave holdings increase at the rate desired. This implies that he will spend only that amount which would insure that slave holdings remain at a subsistence level. It seems unlikely, on *a priori* grounds, that the free society will act in this manner. A free family will probably spend more on their children in the form of increased consumption goods, (e.g. toys or other "luxury" goods). This increased consumption on the part of the free society parents does not add to the stock of human capital. Of course, the free society will presumably spend more than the slave society on its childrens' education, health, etc., which investments in themselves are additions to the stock of human capital. However, the more the free society spends on consumption goods for its children, the less it saves, other things being equal.

A third qualification stems from the fact that the labor force in the slave society contains free labor. Moes tacitly assumes that there is no free labor in the slave society, but this assumption is clearly untenable for there is at least the slaveowner and family. A more realistic assumption would have allowed for a free labor force in the slave society which,

of course, there was. It is difficult to see how such an assumption would have unduly complicated his discussion and it would have obviated the need for this qualification. If it is assumed that there is free labor in the slave economy and if it is assumed for the sake of simplicity that the free family size in both economies is the same, on the average, then the free labor force in the slave economy would expand at the same rate as the labor force in the free society. In Moes' terminology the free labor force in both societies increases via the consumption sector.

A fourth qualification is related to Moes' failure to consider the composition of the wealth variable in each society's saving function. Closely related to this qualification is the inconsistency on the part of Moes as to whether slave labor is capital or labor. In part of his analysis Moes treats slaves as capital and in other parts he treats slaves as labor. The authors of this paper share the view that the slave was capital and the rest of the analysis proceeds in this vein. Moes suggests that since slaves are income producing assets, slave holdings affected the saving ratio. The larger the slave holding, the more the desire to save would be satisfied.

Furthermore since the slave holdings expand naturally, there is built-in capital appreciation or capital gains in slaveownership. Therefore, the very fact that slave holdings increase naturally tends to reduce the saving ratio. Unfortunately, Moes failed to consider the possibility that there might be similar types of income producing assets in the free society, which would exert similar influences on the saving ratio.

Undoubtedly there were such income producing assets in the free society. For example livestock and beasts of burden would fall into this category. External economies of scale would provide a similar reaction. To illustrate, the advent of railroads which reduced transportation costs would tend to increase the return on existing capital stock; thus, to the extent that financial securities appreciated in value, there would be a reduction in the desire to save. In light of this qualification it is suggested that the composition of income-producing assets becomes an important factor. If both societies had similar holdings of income-producing assets that appreciated in value over time, then, other things being equal, there would be similar influences on the desire to save. In order for Moes' conclusions to hold it could be assumed that such holdings in the slave society were quantitatively more significant than in the free society, an assumption which may or may not be realistic. Other things being equal, however, the addition of a capitalized labor force to the stock of income-

producing assets suggests that the stock of appreciating assets would be greater in a slave society than in a free.⁸

III

IN DEVELOPING HIS ANALYSIS Mr. Moes neglected to indicate one difficulty which his arithmetical example would encounter if he had used other plausible figures for the average saving ratio in the Ante-Bellum United States. With respect to the saving ratio, the following is his own arithmetical example of free and slave societies, which counted 100, the cost of expanding the slave population, twice, once as income to the slaves and once as income to the masters.

Table 1
DISTRIBUTION OF INCOME

<i>Free Society</i>		<i>Slave Society</i>	
Capital	Labor	Capital	Labor
300	700	600	500

Using a 20 per cent saving ratio in both economies, Mr. Moes got savings of 200 in the free economy and for the slave 120—100 (the expense of expanding the slave labor force) or net savings of 20. If a lower, but nevertheless plausible saving ratio for a developing economy, 10 per cent or 5 per cent is assumed, the total saving in the slave economy becomes negative 40 in the case of 10 per cent and negative 70 in the case of 5 per cent.

A somewhat different approach obviates some of these difficulties and points up the first neglected aspect in Mr. Moes' analysis. It is often assumed that, other things being equal, the greater the inequality of income distribution, the greater the saving. Surely, a slave society represents an extreme case of income inequality and the Ante-Bellum northern United States was, by comparison, an example of relative equality in income distribution. Therefore, in a slave society of equal total and per capita income, the total savings should be higher. If the free society saved 100, 10 per cent of its income, the slave society should save more than 100. If the savings in the slave society were greater than those in the free by, say 50 per cent, then the saving ratio of the slave capitalists

⁸ See, however, the remarks of Richard Butch, in Alfred H. Conrad, *et. al.*, "Slavery as an Obstacle to Economic Growth in the United States: A Panel Discussion," *Journal of Economic History*, Dec. 1967, pp. 540-41.

would be 25 per cent (150/600). If the ratio were 5 per cent or 50 for the free society, then it would be 12.5 per cent (75/600) for the slave society capitalists. For the slave society, in his arithmetical illustration, to save as much as the free, it must save 100 or an additional 10 per cent. If, for example, the average saving ratio in the free society is 5 per cent, it must be 15 per cent in the slave society or 25 per cent of the capitalists' income.⁴

Another neglected aspect in Mr. Moes analysis is that it applies fully only to a special, though representative, case, that of the planter who is expanding his labor force by exactly the amount of the natural increase and who is, presumably also expanding his stock of the other factors of production, land and capital, at approximately the same rate. In this case, the natural rate of increase of his slave population would tend to satisfy this slaveowner's propensity to save. An exactly opposite effect is at work in two other representative, though also special, cases.

The first of these cases is that of the planter who sells off all of his natural increase. With many border state planters this was a major source of revenue and income to the region.⁵ In this situation there was no natural increase in the asset which could satisfy such a planter's desire to save, but, rather, only an income stream produced by his investment. In time his saving would be affected by his income. By contrast in a free society, in which the labor force and its natural increase is not capitalized, there is no monetary income stream to individuals generated by the investment in the expansion of the labor force, and hence, no opportunity for an individual to save any of the return. Only in a slave economy would this investment for the economy as a whole return a monetary income to an individual, becoming thus a part of the national income, a portion of which would be saved. In this special but also representative case the *realized* propensity to save would be higher for a slave than a free society, other things being equal. This case also includes a planter who rented his natural increase, or excess, slaves.

The second case is at the other extreme. It is that of the planter who is rapidly expanding his operation and hence buying a number of slaves. Ideally he wants only field hands. The price of field wenches is above the full return to the investment of their investment in increased ability to add to the labor force over time. Thus the future increase in the asset is consciously

⁴ See, however, the remarks of Stanley Engerman in Conrad, *et. al.*, "Slavery as an Obstacle to Economic Growth," *loc. cit.*, pp. 542-43.

⁵ Among other discussions, see: Archer Jones and Paul H. Hoepner, "The South's Economic Investment in Slavery," *Am. J. Econ. Sociol.*, July, 1967, p. 299.

capitalized. Hence this future growth is conceived of as a return on a previously made investment. To the degree that the planter was conscious of this, the natural increase of his slave stock would be viewed as income rather than capital appreciation. To the degree that he viewed it as income, he would save a portion of it and to the degree also that other or all planters, who were not expanding their operations, similarly viewed this natural increase, the propensity to save of the slave society would be higher than the free.

IV

Conclusions

ALTHOUGH MOES HAS MADE a strong positive contribution by including slave holdings as a wealth variable in the saving ratio for the Ante-Bellum South, the conclusions he derived from this assumption must be qualified. He has tacitly assumed that there were no similar wealth variables present in the saving ratio for the free society. The authors have contended that this tacit assumption is not tenable and that once it is relaxed Moes' conclusions are weakened or perhaps even negated. Furthermore there is some question with regard to the strength of slave holdings as a wealth variable. The case of a planter who sells off all of his natural increase of slave holdings and the case of a planter who is rapidly expanding his operation and consequently buying a number of slaves provide cogent illustrations of circumstances in which the influence of slave holdings on the saving ratio might be exactly the reverse of that suggested by Moes. Finally, the authors have argued that to extend conclusions regarding the saving ratio only to comparative rates of growth between regions outside the context of a complete growth model is misleading.

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UNICEF HAS PROVIDED for the training of more than 430,000 pediatricians, nurses, midwives, child-care workers, community leaders, nutritionists, sanitation workers, school teachers and other personnel serving children.

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In Memoriam: Arnold M. Rose, 1918-1968

ARNOLD M. ROSE, whose untimely death occurred on January 2, 1968, was an occasional contributor to the *American Journal of Economics & Sociology* and an indefatigable worker in its interest. He was an associate editor of the *American Sociological Review* and a member of the boards of several other journals and since he began reporting his studies in 1942 he had published hundreds of articles in sociological journals in the United States, Great Britain, France, Italy and other countries. So perhaps his association with this *Journal* was the least of his associations. But it is one measure of the man that he never let us think so.

There was, of course, an affinity between us. A native of Chicago, he was a product of the University of Chicago; I was myself a beneficiary of the university's largesse through its Institute of Sacred Literature a little earlier in the days when Shailer Mathews was dean of its Baptist divinity school. Rose took an A.B. in sociology in 1938 and then an A.B. in economics in 1939; his later sociological studies, more often than not, were directed to economic problems. After taking his M.A. and Ph.D. from Chicago, in 1940 and 1946, he spent himself in three areas: teaching, at Bennington College, Howard University, Washington University, St. Louis, and, since 1949, the University of Minnesota; research, in such areas as methodology, general theory, and social problems; and professional organization, in the American Sociological Association, the International Sociological Association, the Midwest Sociological Society, the International Group for Psychiatric Sociology and two organizations he had helped to found, the Society for the Study of Social Problems and the Law and Society Association. He had been a Fulbright scholar in France and a Fulbright professor in Italy, and a State Department American Specialist in Europe and South Asia. He won the first award given by the American Association for the Advancement of Science for essays in social theory and at his death was President-Elect of the American Sociological Association. He was the author, co-author or editor of 18 books.

Sheldon Stryker, in his affectionate memorial review of Arnold Rose's career in the *American Sociologist*,¹ emphasized Professor Rose's total commitment to sociology. In this Arnold Rose gave example and inspiration to all of us. Stryker notes that Arnold Rose's death leaves all of us and the areas of his interest poorer. Yes, indeed. But ever so much richer by his efforts, shared with all of us. The powerful intellect we have lost is apparent in the presidential address he prepared but could not deliver.² The warm, dedicated friend and colleague is apparent in the influence he exerted upon us; it will manifest to the end of our days.

WILL LISSNER

¹ *Loc. cit.*, Vol. 3, No. 1 (February, 1968), pp. 60-61. See also *American Sociological Review*, Vol. 34, No. 5 (October, 1969), p. 622.

² "Varieties of Sociological Imagination," *American Sociological Review*, Vol. 34, No. 5 (October, 1969), pp. 623-30.

The Impact of Henry George on British Economists, I

The First Phase of Response, 1879-82; Leslie, Wicksteed and Hobson

By BERNARD NEWTON

I

Introduction

HENRY GEORGE (1839-1897), ECONOMIST, journalist, political activist and social reformer, had a dramatic impact upon the British economists during the last two decades of the 19th century.¹ George's *Progress and Poverty*, published in 1879, crossed the ocean from the United States to the British Isles; and both its explanation of poverty in the midst of steadily increasing wealth, and its land reform message, evoked a strong response during the 1880s. Land reformers, politicians, journalists, socialists and large numbers of the general populace, as well as the professional economists, were all affected. The book had the greatest sale of any on an economic subject to that date; in fact, sales were about 100,000 copies by the end of 1883.² The interest in Henry George and his ideas was enhanced during the 1881-89 period by five widely publicized visits of the author to the British Isles. Land reform organizations were formed to foster the taxation and land "nationalization" scheme proposed by George. The socialistic Fabian Society was formed in 1883 and 1884, and such leading founders as George Bernard Shaw³ and Sidney Webb⁴ have credited Henry George with giving their early leaders the stimulus

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¹ This paper represents one phase of a continuing study of the interaction between the British and American economists during the last thirty years of the 19th century. The two Americans who had the greatest impact on the British during this period were Francis Amasa Walker and Henry George. My work on the former has been published as *The Economics of Francis Amasa Walker; American Economics in Transition* (New York: Augustus Kelley, 1968).

² Elwood P. Lawrence, *Henry George in the British Isles* (East Lansing: Michigan State University Press, 1957), p. 31.

³ *The Intelligent Woman's Guide to Socialism and Capitalism*, (New York: Brentano's, 1928), p. 468.

⁴ "Socialism in England," *Publications of the American Economic Association*, IV (April, 1889), p. 88.

for reform. By the late 1880s, the Radicals of the Liberal Party had allied themselves with Henry George in supporting land taxation.⁵

This paper is primarily concerned with the reactions of the then contemporary economists in Great Britain to Henry George and his economic ideas, particularly as they are presented in *Progress and Poverty*.

II

Pertinent Essentials of *Progress and Poverty*

A REVIEW of the essential economic features of *Progress and Poverty* is helpful in placing the discussions of this work by the economists of Great Britain into a clear perspective. Fundamentally, *Progress and Poverty* attempts to explain "why, in spite of increase in productive power, do wages tend to a minimum which will give but a bare living."⁶ In order both to accomplish this purpose and to present society with a remedy for poverty in the midst of progress, George, in effect, divides his work into three basic conceptual units.⁷ In its first basic division, George attempts to disprove the wages fund theory and the Malthusian population doctrine because they are the two coordinate theories which underlie the English classical school's pessimistic explanation of why wages remain at a minimum despite increases in societal wealth. The former theory, in its starkest form, maintains that the wage level is the quotient between the fixed sum of capital advanced by the capitalists to the workers and the population in the working force. George attacks this theory by endeavoring to demonstrate both that wages are not generally advanced out of capital, and that the wage level is not dependent upon the available amount of this capital. He avers that, in actuality, it is rather that capital assists labor in production, and "that wages, instead of being drawn from capital are in reality drawn from the product of the labor for which they are paid." George next assaults the Malthusian population doctrine with both empirical and logical arguments, maintaining that there is no observable tendency for population to increase faster than subsistence; that man draws his subsistence from the vegetable and animal kingdoms which have a tendency to increase faster than man; and that a rise in population ~~never gives a more than proportional increase to the productive ability of the human~~ ^{never gives a more than proportional increase to the productive ability of the human}.

⁵ Lawrence, *op. cit.*, p. 73. This work excellently depicts both George's reform activities in the British Isles, and the response of general British opinion to George and his doctrines.

⁶ *Loc cit.*, 4th ed., (New York: D. Appleton, 1881), p. 15.

⁷ Actually, George divides *Progress and Poverty* into an "Introduction," ten "Books" and a "Conclusion."

Once George has attacked what he deems to be the invalid elements of English classical theory, he is ready for the second conceptual phase of his work, in which he presents his own explanation of poverty in the midst of progress. The analysis centers upon distribution theory. George accepts Ricardo's rent theory in which rent is determined by the difference between what is produced by labor and capital on superior (supra-marginal) land, and what is produced by an equivalent application of labor and capital on no-rent land (which is the poorest land in use). The sum available for both wages and interest combined is the residual after rent payments are made from the total produce. This sum is equivalent to the amount that is earned by labor and capital on the no-rent (marginal) land. George maintains that increases in society's productive ability simultaneously lower the margin of cultivation; thus, increases in production are accompanied by increases in rent. Societal progress is also accompanied by a fall in the separate *relative* shares remaining for labor and capital. Thus, the level of wages and of interest remains depressed.

In the third major conceptual phase of *Progress and Poverty*, George presents both his solution to the problem, and the effects of adopting his solution. He advocates the elimination of private property in land, not by taking away land titles, but by absorbing rents through taxation.⁸ In consequence, equal rights to land will be made available to all, and the evils of landlordism would be abolished. Producers would be stimulated by relief from taxation. Furthermore, land could no longer be withdrawn from use by speculators or by those who wished to use it unproductively. Land would now be available to those competitors who could use it most productively, and who would therefore be capable of paying the highest rent. Thus, land speculation would be eliminated; industrial depressions would disappear, and

we shall abolish poverty; tame the ruthless passions of greed; dry up the springs of vice and misery; light in dark places the lamp of knowledge; give new vigor to invention and a fresh impulse to discovery; substitute political strength for political weakness; and make tyranny and anarchy impossible.⁹

III

The Framework of Response

THE IDEAS OF HENRY GEORGE found the British economists considerably

⁸ George did not adopt the term "single tax" as a term significantly associated with his reform and political activities until 1888. See Charles Albro Barker, *Henry George* (New York: Oxford University Press, 1955), pp. 508-11.

⁹ *Progress and Poverty* (1881 ed.), *op. cit.*, p. 490.

more responsive than the American economists, who generally either ignored *Progress and Poverty* or gave it short shrift.¹⁰ In the main, the reaction of the British economists was not to George as an established member of their profession, but to the figure who stimulated such immense political agitation and popular interest. However, the roots of their response lay in the British background of land reform and of economic theory that developed during the course of the 19th century.¹¹ The system of land tenure in Great Britain, characterized by primogeniture and entail, prevented the development of an extensive body of independent yeomanry; and this stimulated agitation for reform on the part of such writers as Thomas Spence (1750-1814), William Ogilvie (1736-1813) and Herbert Spencer (1820-1903). Some leading British economists also were part of this tradition; and the Land Tenure Reform Association, founded in 1870, had such eminent economists as John Stuart Mill, Thorold Rogers, Cliffe Leslie and John E. Cairnes among its members.¹² As for economic theory, Henry George's analysis and land tax proposal were a logical extension of the English classical rent theory, and in the tradition of David Ricardo, James Mill, John Stuart Mill and Cairnes.¹³ Interest in Henry George's economics among his economist contemporaries in Great Britain can conveniently be divided into three phases. The first phase was that of a developing interest, and extended approximately from the end of 1879 through 1882. The second phase was a short one of intense interest during 1883 and 1884, and it corresponded to the initial period of extensive popular national publicity for both George and his ideas. The third period extended approximately from 1885 through 1901, and it was characterized by only a moderate concern with George's ideas. The attention of British economists was turning increasingly to the developing marginal analysis and most particularly to the ideas of Alfred Marshall and the Austrian school. After 1900, Henry George went into rather sudden limbo, where he remained until about 1914, when he emerged as a figure whose ideas were largely of historical interest.

¹⁰ Perhaps ironically, until 1890, the only detailed published analysis by an American economist was undertaken by the figure who was then the nation's most prominent economist, Francis Amasa Walker, in *Land and Its Rent* (Boston: Little, Brown, 1883), pp. 6-9, 141-81, 194-96.

¹¹ *University of Chicago Press, The History of Economic Thought* (Chicago: University of Chicago Press, 1931), p. 232.

¹² *Ibid.*, p. 232n.

¹³ See Arnold Toynbee, "Progress and Poverty," a Criticism of Mr. Henry George," Appendix to *Lectures on the Industrial Revolution in England* (London: Longmans, Green, 1902), p. 291; Hugh Dalton, *Some Aspects of the Inequality of Incomes in Modern Communities* (London: George Routledge, 1920), p. 54; T. W. Hutchison, *A Review of Economic Doctrines, 1870-1929* (Oxford: At the Clarendon Press, 1953), p. 125; and Erich Roll, *A History of Economic Thought*, 3d ed., (New York: Prentice-Hall, 1956), p. 423.

IV

The Gathering Interest (1879 through 1882)

THE FIRST PHASE BEGAN immediately upon publication of *Progress and Poverty* in November, 1879, when Henry George sent T. E. Cliffe Leslie a promised copy of his work. Leslie, a follower of the historical approach to economics, responded to George by informing him that although they were both opposed to the "School of Economics" (the English classical school), he differed from George on some points.¹⁴ In September of the following year, Leslie again wrote to George, announcing that he had written an article on "Political Economy in the United States," in which he discussed *Progress and Poverty* at some length. He hastened to assure George that although he was critical, he "by no means sought to disparage the ability shown" in the work.¹⁵

In his now classic article,¹⁶ Leslie included what is the first review of *Progress and Poverty* by an English academic economist,¹⁷ and he anticipated many of the principal points of later British critics. True to his word, he did not disparage George, and he expressed respect for George's learning, literary powers and "fertile imagination."¹⁸ Although Leslie, like George, rejected the wages fund theory, he couldn't accept George's substitute idea that wages are drawn out of the *current* product of labor. He asserted that regardless of whether the capitalists or the workers advance the capital, the workers must maintain themselves out of the accumulated products of past labor, rather than out of the labor that the workers are currently performing.¹⁹ Leslie next advanced an argument designed to refute George's fundamental conclusions about long-run wages and interest. He claimed that historical evidence shows that long-run wages, interest and rents have all risen in the British Isles. He supported this empirical argument by means of a hypothetical example designed to demonstrate that concomitant increases in population and the level of agricultural productivity can mean increases in wages as well as rent.²⁰ This argument was later to be often used by other economists. It should be noted that although George often spoke and wrote about the

¹⁴ T. E. Cliffe Leslie to Henry George, November 26, 1879. (Henry George Collection, New York Public Library; hereafter cited as HGC).

¹⁵ T. E. Cliffe Leslie to Henry George, September 26, 1880, HGC.

¹⁶ T. E. Cliffe Leslie, "Political Economy in the United States," originally published in *Fortnightly Review*, 34 (October 1, 1880).

¹⁷ It is noteworthy that popular British interest in George had not yet been stimulated.

¹⁸ *Ibid.*, p. 147.

¹⁹ *Ibid.*, pp. 149-51.

²⁰ *Ibid.*, pp. 151-52.

level of wages remaining depressed, and about the misery and poverty of the workers, the theoretical conclusion imbedded in his analytical framework is that society's progress is accompanied by a fall in the *relative* share, rather than in the *absolute* share of wages.²¹

In his conclusion, Leslie, like many succeeding writers, deemed George's theory to be the product of the limited circumstances of the special economic history of California, rather than a conceptual analysis applicable to the British Isles.²²

Further evidence of a growing interest in *Progress and Poverty* among economists is found in three letters written to George in October, 1882. This approximately coincides with the beginning of what Prof. Elwood P. Lawrence has called a period of discovery of both George and *Progress and Poverty* on the part of British newspapers.²³ The first letter was written by an Oxford professor (the great philologist and orientalist, Max Müller) who informed George that he lent Oxford economist Bonamy Price his copy of *Progress and Poverty*, and the latter was unconvinced by the book's arguments for he deemed the work "entirely Utopian."²⁴ A second letter was from the British clergyman, Philip H. Wicksteed,²⁵ who was still in the formative stage of his economic thinking, shortly before he became a disciple of William Stanley Jevons. Wicksteed was extremely enthusiastic, explaining that *Progress and Poverty* made a "new heaven and a new earth" for him; and he vowed to join the "new crusade." He explained that he had long sensed a fundamental fallacy in classical economics, and that George had crystallized his thinking for him, particularly by pointing out that capital does not put labor to work. However, Wicksteed did disagree somewhat with George's conclusion that since population growth leads to increases in agricultural activity, the Malthusian population threat was non-existent. Wicksteed agreed that both the use of more effective technology and arts in agriculture, and the implementation of George's principles would make the Malthusian pessimistic conclusions "a bugbear" in practice. But he averred that a theoretical treatise could not properly eliminate the entire Malthusian problem.

The third letter was not from a Briton, but from the distinguished Belgian economist, Emile de Laveleye,²⁶ who announced that he had just

²¹ George, *op. cit.*, p. 195.

²² Leslie, "Political Economy in the United States," *Essays, op. cit.*, p. 153.

²³ Lawrence explains that this period begins in September, 1882 and continues approximately through 1883. See Lawrence, *op. cit.*, p. 63.

²⁴ Max Müller to Henry George, October 3, 1882, HGC.

²⁵ Philip H. Wicksteed to Henry George, October 29, 1882, HGC.

²⁶ Laveleye's views were similar to those of the Socialists of the Chair in Germany. He took an historical viewpoint and denied the existence of natural laws. The subjects that he wrote about included land systems, property and socialism. See Lewis H. Haney, *History of Economic Thought* (New York: Macmillan, 1949), p. 851.

completed a review of George's "admirable" book for the *Contemporary Review* in London.²⁷ This review was the first article written by a professional economist for the British public that was entirely devoted to *Progress and Poverty*. Two years before, Laveleye had written a review for *La Revue Scientifique* in Paris; it was favorable, although he did not give the work his full endorsement.²⁸ The English review, however, was less favorable;²⁹ in fact, it did not reflect the admiration expressed in the letter. The tone of the review was fair-minded and respectful, but it was adversely critical to a substantial degree. Laveleye's approach was to present what merit he could discern in the major arguments presented by George, but he then generally assessed the American's view as either deficient or fundamentally erroneous. This approach was developed from Laveleye's view that although George had partly triumphed in his criticisms of classical principles and definitions, his arguments were basically "without foundation."³⁰ Laveleye buttressed this generalization by referring to George's attacks on the wages fund theory and the Malthusian population theory. Like Leslie before him, Laveleye agreed with George in rejecting the wage fund theory, and disagreed with George in refusing to accept his notion that capital is drawn from current wages.³¹ As for George's argument that the Malthusian population theory is inconsistent with the facts, Laveleye concurred with George insofar as the then current facts were concerned, but he strongly asserted the validity of the underlying theoretical principle.³² On the matter of the causes of poverty, Laveleye agreed with George that it was not due to inevitable laws and the niggardliness of nature, but rather to the imperfections of society's institutions. However, he averred that the way in which to eliminate poverty was to eliminate the military, war debts, false wants, and the squandering of luxury.³³ Although he was in accord with George in accepting the Ricardian rent theory, he argued that the American was incorrect in attributing economic inequality exclusively to the rise in rents that is caused both by increasing population and by technological improvements. Following the position of continental socialist thinkers, Laveleye maintained that the proportion of interest and profits taken by the constantly increasing supplies of capital is a more important cause of inequality than the

²⁷ F. L. Laveleye to Henry George, October 23, 1882, HGC.

²⁸ Barker, *op. cit.*, p. 333.

²⁹ *Ibid.*, p. 385.

³⁰ "Progress and Poverty." A Criticism," *Contemporary Review*, 42 (November, 1882), p. 788.

³¹ *Ibid.*, p. 789.

³² *Ibid.*, pp. 791-93.

³³ *Ibid.*, p. 792.

increase in rents.³⁴ As for George's scheme for economic reform, the Belgian economist accepted George's land-tax proposal as only a partial solution to the problem of worker poverty; and he was critical of the American reformer for his inadequate treatment of how the government was to use the tax revenues.³⁵

Several further coincidences of the developing interest in George among economists during this first phase of response are found in a number of other sources. For example, Professor William A. Smart wrote years later of the sensation which *Progress and Poverty* made on its appearance. Smart did not state what his attitude was towards the treatise, but he proclaimed that "very many were for the moment carried off their feet by its earnestness, its plausibility, and its headlong rhetoric, and spoke of it as a new departure—if not a new gospel."³⁶ Then, too, James E. Thorold Rogers, a professor at Oxford, reported that, while in the United States in 1881, he found that the public "was interested and amused."³⁷ Furthermore, Arnold Toynbee, who was also an Oxford professor, wrote in a letter to his sister in 1882 that:

I have known George's book for a very long time. I always thought it, while full of fallacies and crude conceptions, very remarkable for its style and vigor, and while no economist would be likely for a moment to be staggered by its theories, it is very likely to seem convincing to the general reader.³⁸

In addition, John A. Hobson, in reflecting back on his development as an economist during the 1870s and 1880s, has testified to the profound effect that Henry George had upon him.³⁹

(Continued)

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³⁴ *Ibid.*, p. 796.

³⁵ *Ibid.*, p. 800.

³⁶ William Smart, *Taxation of Land Values and the Single Tax* (Glasgow: James Maclehose and Sons, 1900), p. 99.

³⁷ James E. Thorold Rogers, *Six Centuries of Work and Wages* (New York: G. P. Putnam's Sons, 1884), p. 531.

³⁸ The quotation from Toynbee's letter is taken from F. C. Montague, "Arnold Toynbee," *Johns Hopkins University Studies in Historical and Political Science*, VII (1889), p. 11.

³⁹ See excerpt from an address "Unfashionable as an Economic Heretic" (delivered July 14, 1935), as printed in John Maynard Keynes, *The General Theory of Unemployment, Interest and Money* (New York: Harcourt-Brace, 1936), p. 365. I discuss Hobson in more detail in forthcoming papers.

Project Rondon, a Brazilian Experiment in Economic and Political Development

By H. JON ROSENBAUM*

THREATS, REAL OR IMAGINED, to governmental authority are a common feature of political life in almost every developing country. Recent years have provided the observer with innumerable examples of political instability in the "Third World" and a variety of official attempts by governments at reorienting or controlling the energies and activities of dissident elements. In several cases students have taken a leading role in the destruction of existing regimes while in other instances students have promoted or participated in efforts directed at the demise of established governments. Whether violent or passive, whether occurring in developing or developed countries, student demonstrations increasingly have become a subject of governmental concern.

The Brazilian Government, during the summer of 1967, inaugurated an experimental program, suggested by a professor at Guanabara State University, Wilson Chueri, and by some military officers, which it believes may eventually succeed in reducing student discontent and defiance and in redirecting student fervor toward "responsible" developmental goals. This Brazilian attempt at student political socialization and pacification has been named Project Rondon.¹

Under the direction of Project Rondon, Brazilian student volunteers are given the opportunity to use their academic training in the most remote areas of Brazil during their vacations. The Brazilian Government calculates that participating university students will thus gain a thorough appreciation of the Government's inability to satisfy all student grievances quickly and to solve all national problems immediately. The result, the military Government hopes, will be increased student political tolerance and patience. This expectation is expressed best, perhaps, in a fundamental Project Rondon slogan which commands or pleads "Speak less

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¹ General Cândido Mariano da Silva Rondon, the man for whom the project is named, was a military engineer and explorer of great distinction. In 1910 Rondon became the first Director of the Indian Protection Service, and in 1914 he guided Theodore Roosevelt through the Amazon region. Rondon died in 1958 at the age of 92.

and work more." While services are provided by the students, it should be emphasized at the very start that the primary purpose of Project Rondon, as it is currently designed, is not to provide assistance to Brazilians living in the wilderness but rather to change the perceptions and opinions of student participants.

The Ministry of the Interior, which has general responsibility for the supervision of Project Rondon, has outlined the Government's aspirations for the program in several documents. A summary of these goals as well as a description of the operation will be helpful, and perhaps necessary, before analyzing the results and speculating on the future of the program. Heading the long list of goals is the desire that the students become acquainted with the "Brazilian reality." This is to be accomplished by student participation in planning, execution, and evaluation of the Project. Military authorities in Brazil are greatly concerned about national security and fear that Brazil's sparsely populated interior will pose a future danger to the nation's territorial integrity and an invitation to invasion. Therefore, a secondary goal of Project Rondon is to demonstrate the Government's interest in the welfare of the isolated people living in the North and West of the country. Student volunteers, the Government feels, will not only bring technical assistance and hope to these people but also may become interested in settling along Brazil's frontiers upon graduation.² In addition to these goals, officials of Project Rondon think that participants will be offered an opportunity to be useful to their country, discover new opportunities, practice professions, and develop new interests. (The directors are quick to warn that the project is definitely not designed for university students merely seeking a free vacation or grand adventure.)

I

PROJECT RONDON began with a pilot program in which 30 volunteers were dispatched to the interior during the July 1967 winter vacation. The scheme has consistently grown in size with Rondon I, conducted during January and February 1968, enlisting 648 volunteers and Rondon II, held during July 1968, attracting 3800 students. Rondon III was carried out during January and February 1969. Officials received more than 10,000 applications for Rondon III but limited it to 5,000 participants because they thought they were incapable of coordinating a larger project at the time. Since the initiation of Project Rondon, the program has not only

² A map of Project Rondon sites displays the geopolitical concerns of the Brazilian Government. Project Rondon has concentrated its activities along the Bolivian and Peruvian frontiers as well as "strategic" rivers.

increased in size but has expanded the scope of its activities. The pilot project and Rondon I concentrated on providing professional and technical assistance, particularly medical services. While continuing to offer this kind of aid, Projects Rondon II and III had the further goal of contributing to community development.

Student volunteers are attracted to the movement by laudatory newspaper articles and radio programs as well as by campus meetings convened to explain Project Rondon's operations. At these gatherings former participants speak of their experiences and show slides of the Brazilian interior. Besides providing free film to volunteers and releasing information to the press, the organizers of Project Rondon do not formally recruit students. The directors believe that prospective applicants must have a genuine commitment to participate, a commitment that is spontaneously achieved and not the result of a vigorous advertising effort.³

Selection of applicants is not based on the political or ideological beliefs of the students but on their professional and technical preparation and the Project's manpower needs. Application questionnaires ask candidates to supply information about their education and skills, such as whether or not they can swim, but not about political, economic, or social attitudes. Since preference is given to students who are most advanced in their education, the average age of the volunteers is a relatively high 23.

Project Rondon has been divided into national and regional programs. Coordinated by the national Project Rondon office in Rio de Janeiro, participants in regional projects serve as volunteers in the underdeveloped parts of their own states. The national or "federal" operations are composed of students from the entire nation and are conducted almost entirely in the Amazon area and the western states of Mato Grosso and Goiás. This distinction is important when describing selection because before a student can be chosen for a federal project he must first serve in a regional program.

³ The Brazilian mass media have given abundant publicity to Project Rondon. A content analysis conducted by Rondon officials and completed in January 1968 indicates that between December 1967, when the Project was initiated, and May 1968 newspapers devoted 156 pages to reporting and analyzing the program. In addition, 511 editorials commented favorably on the scheme while only fifteen criticized it. Television stations provided their viewers with a total of five and a half hours of Rondon coverage. None of this media treatment was sponsored by the Government, but Project Rondon staff members estimate that free press publicity for Rondon I alone was worth one billion cruzeiros. Certainly this publicity also was valuable to the Government since it demonstrated concern for the problems of the interior.

One newspaper, greatly impressed by Project Rondon, has half jokingly suggested that Brazilian Congressmen should learn authentic nationalism and responsibility by also being dispatched to the Amazon during parliamentary holidays. *Jornal do Brasil*, August 11, 1968.

After being selected for Project Rondon, either for a national or a regional operation, the volunteers must demonstrate continued interest in the program by attending obligatory training courses and by volunteering to work in Rondon offices.⁴ In this manner the students participate in planning and analyzing the program and also develop a commitment to it. Naturally, this process permits an opportunity to constantly evaluate the volunteers' quality and a final chance to weed out undesirable students before they are sent to the interior.

Volunteers must be willing to sign the Project Rondon "Code of Ethics" which pledges them to maximum dedication, to respect and protect their colleagues, and to maintain an understanding attitude towards alien norms which might be encountered in the field. Moreover, the "Code of Ethics" specifically forbids the volunteers from exploiting, for religious or political purposes, the information gathered during the program, establishing contacts with institutions in the name of the Project without previous authorization, soliciting or receiving private funds or awards, publishing reports of facts observed or data collected without the permission of the Project Coordinator, carrying arms without the sanction of the Coordinator, execution of private services not provided for by the project plans, and defending interests and opinions that conflict with the goals of Project Rondon. These prohibitions and directives are imposed to insure that the effectiveness of the project will not be endangered by indiscretion and to maintain the spirit of the groups.

Although Project Rondon is supervised by the Ministry of the Interior, support is provided by a variety of federal ministries and agencies, primarily the Ministries of Health, Education, Agriculture, Planning and Transportation; the military; state and municipal governments; and the universities. Project Rondon's national offices are conveniently located next to those of the Ministry of Interior and the Superintendency for the Development of the Amazon (SUDAM—Superintendência do Desenvolvimento da Amazonia). Not only is the Coordinator, Lieutenant Colonel Mauro Costa Rodrigues, a military officer, but the military participates in the planning and evaluation of the Project and provides support in the form of transportation and communication services. Moreover, Project Rondon groups often work in conjunction with military civic action units.

⁴ The federal coordinating office in Rio de Janeiro, for example, employs only 10 per cent of its staff and these are seconded from various government ministries and agencies. The remainder of the staff is composed of student volunteers. The Rio staff generally consists of fifty individuals.

II

NORMALLY A PROJECT RONDON OPERATION is initiated when a Brazilian government agency wishes to have a study undertaken or requests volunteer middle level manpower to execute a project already planned. For example, the Service for Financing Urban Areas (SERFAU—Serviço de Financiamento de Áreas Urbanas) solicited Project Rondon to conduct a socio-economic survey in the state of Paraná. In this case SERFAU agreed that the first study would be financed by Project Rondon, but, if proven successful, SERFAU would defray the expense of future studies.

Each agency wishing to utilize volunteer services provided by Project Rondon requests a specific number of students with particular academic preparations. Engineers, doctors, economists, architects, botanists, and other specialists are then organized into appropriate groups. At the same time Project Rondon officials decide whether the operations will be regional or national. The Army telex system is employed to make arrangements for accommodation, and Air Force and Navy personnel and equipment are utilized to provide transportation from the cities to the interior. The Army also contributes room and board to the participants when they assemble in cities while in transit to the interior. When the volunteers finally arrive in the interior the host community furnishes lodging in private homes or "hotels" and pays for meals. A large part of the supplies, such as medicine, which are used by the volunteers are donated by private firms and public corporations. For instance, gasoline and diesel oil are freely furnished by Petrobrás, the nationally-owned oil industry.⁵ Administrative expenses are financed by the Ministry of the Interior and a private foundation, The University Movement for Economic and Social Development (MUDES—Movimento Universitário de Desenvolvimento Econômico e Social).⁶ Over \$63,000 was spent administering Rondon I with about half of this sum coming from each source.

After arriving at their final base of operations volunteers are divided into groups of four to ten students which have the task of providing technical assistance and promoting community development. Injections are administered, roads are constructed, schools are planned, and meetings

⁵ Petrobrás and other contributors to Project Rondon are proud of their donations to the experiment. For example, Petrobrás published an advertisement in the *Jornal do Brasil* explaining its donation as well as the value of the Project, *Jornal do Brasil* July 7, 1969.

⁶ MUDES at its inception was planned by its originator, former Governor Ney Braga of Paraná, as the "Brazilian Peace Corps." It seems that the organization, however, has been content to leave the fielding of volunteers to Project Rondon and to serve merely as a source of funds.

are held. Each of these specialized activities is called an "operation." For example, during Rondon II "Operation Augusto Tortolero de Araújo," named after the first volunteer to die during service, planned an agricultural school.⁷

In addition to applying rudimentary notions of his specialty to the population, each volunteer undertakes research in the community to which he is assigned. Topography, soil, mineral resources, population distribution, agriculture, potential local industries, fishing and hunting, commerce, transportation and colonization are among the items studied. After returning to their universities it is expected that the students will prepare reports based on their field research. These accounts are to be used by the universities and the government in future development efforts.

III

THE SPONSORS OF PROJECT RONDON, motivated by what they consider to be an initial success, are already busily preparing future plans for the organization. In order to lengthen the experience beyond the short vacation periods, the erection of university campuses in the interior is being considered seriously.⁸ Urban universities (almost all Brazilian universities now are located in the cities) would, with the assistance of Project Rondon, develop interior branches which would provide bases for Rondon activities as well as for connected practical field research. The University of Juiz de Fora, located in the industrial town of the same name in the state of Minas Gerais, has already established a branch in Mato Grosso, a western frontier state. The Government believes that rural campuses would not only contribute to the educational process but would remove students from the urban environment where they can effectively manifest their anti-Government hostilities.⁹

⁷ Araújo, a veterinary student, drowned on January 26, 1968 in the waters of the Acre River in the Amazon region.

⁸ Another means of giving Brazilian students an opportunity to participate in the development of their nation and to exercise skills learned at the university would be to use student volunteers in the urban slums and *favelas* during vacations or the entire academic year. Such a scheme need not be an alternative to the present program but an addition to it. Since the universities are located in the cities, urban volunteer projects could be long term and continuous. The success of Project Rondon, as it is now constituted, are limited by the short duration of the field experience. It takes time to gain the confidence of the supposed beneficiaries of assistance and an even longer period to initiate self-sustaining community development. Of course, keeping students in the cities contradicts some of the main purposes of Project Rondon, impressing the students with the vastness of Brazil, interesting them in settling along the country's frontiers, and removing them from the cities where they can, and often do, agitate against the Government. However, it can not be denied that the cities, as well as the countryside, are part of the "Brazilian reality."

⁹ The Minister of Agriculture signed an accord with Project Rondon on October 30,

While the Brazilian Government does not expect to permit anyone but university students to participate in Project Rondon as volunteers, foreign students, on an individual basis, will be allowed to take part in the Project's operations. A group of 27 Italian students worked with the Brazilians during Rondon II in Poxoré, Mato Grosso. Students from Panama, Paraguay, and Bolivia, studying in Brazil at the time, also were members of Rondon II. Although Rondon officials are willing to cooperate with student groups from overseas, entire organizations will be unable to participate. The Brazilian Government stresses that the project is a *national* effort and in order to preserve its authenticity, no official foreign assistance will be accepted. Likewise, the Brazilians state that they definitely are uninterested in cooperating with volunteer groups now operating in Brazil which are sponsored by foreign governments, such as the United States Peace Corps. On the other hand, members of private foreign student groups, such as Mexico's Juventude de Anahuac, will be welcomed as individual participants.¹⁰

In spite of the generally poor relations which exist between the Brazilian Government and perhaps a majority of the country's students, Project Rondon has been supported enthusiastically by many students. It is somewhat of a paradox, but, in November 1968, while the Costa e Silva regime was attempting to suppress student unrest by arresting 1,240 students who were secretly meeting on a São Paulo farm, 10 per cent of the nation's university students were applying to Project Rondon. Many observers, this writer included, did not believe the organization would survive when it was created. Even when Project Rondon was founded an intense student antagonism towards the Government existed, and many wondered whether a dialogue or cooperation between mutually hostile groups could be established. Students had been killed and injured by military troops during several anti-Government demonstrations. Although, as has already been suggested, the project has succeeded in attracting student participants, some

1968 which provides for the joint execution of a plan for the implantation of rural colonies and businesses, particularly in the Amazon. It is hoped that former Rondon volunteers and other university graduates will participate in this scheme which is named *Família Semente*.

¹⁰ United States Peace Corps officials in Rio de Janeiro realize that the Amazon and frontier regions are emotional issues in Brazil and are not anxious to become involved in them. They are pleased with the initiative the Brazilian military Government has taken and do not foresee the need for any American assistance to the program. As of this writing, neither the Brazilian Government nor Project Rondon officials have requested advice or help from the Peace Corps or the United States Government.

Individuals interested in participating in Project Rondon may write to the following address: Projeto Rondon, Avenida Franklin Roosevelt 39, 8º andar, Sala 815 Rio de Janeiro, G. B., Brazil.

students naturally continue to suspect the motivations of Government sponsorship. To allow Project Rondon to increase its effectiveness, Rondon officials, particularly Coordinator-General Costa Rodrigues, himself a military man, believe that Project Rondon must do more to legitimize itself with the students. Senhor Rodrigues notes that the program is dependent upon Government resources but is hopeful that it can become a non-governmental autonomous foundation in the future.¹¹

Nearly everyone involved has benefited from Project Rondon in one way or another although some negative political repercussions for the Government may yet result. These theoretical considerations, however, will be considered later. The Government has received a great deal of positive publicity in connection with Project Rondon. In fact, the volume of favorable publicity has been so large that one observer has been moved to note that "judging from all the publicity one would think it was a mass effort in which the interior of the Amazon was suddenly somehow transformed, in a matter of weeks, into a region possessing a similar degree of development as that enjoyed by the Connecticut Valley in the United States." The people living in the interior of Brazil also have been assisted by the project since their living conditions have been slightly improved. Students have benefited from the opportunity to apply their knowledge and skills. Nevertheless, Project Rondon is not without its detractors and critics.

IV

PERHAPS THE MOST SERIOUS CHARGE made against the movement is that it exists merely as a propaganda organ of the Government. Hostile critics complain that Project Rondon is just another attempt by the Government to substitute illusion for substantial action in rectifying the country's underdevelopment. Although a few members of the Government itself are critical of Project Rondon because they believe it is a Communist front organization, most public accusations have come from the extreme nationalists of both the political left and right. Both leftists and rightists share the suspicion that Project Rondon is being used to subvert Brazilian nationalism. While the leftists are convinced that it is an adjunct of the Central Intelligence Agency, the rightists worry about Communist penetration. A few political moderates also object to Project Rondon, and note that government supported youth groups have been characteristic of

¹¹ As a first step towards reducing military presence in the organization, Lieutenant Colonel Rodrigues is resigning his Air Force commission and becoming the permanent director of Project Rondon.

communist and fascist totalitarian societies. Those moderates sympathetic to the United States believe that the program is undermining relations with America by its refusal to coordinate activities with the Peace Corps.¹²

Some politicians have criticized the program because they thought repudiation would attract votes. On one occasion, for example, students from São Paulo who were serving as volunteers in the resort city of Petrópolis, located in the state of Rio de Janeiro, accused the city's Secretary of the Treasury of not supporting Project Rondon. The Secretary claimed that the program did not help all Brazilians but "only served the Indians."¹³ Other municipalities have refused to cooperate with Project Rondon and have insisted that they did not have the financial resources needed to house and feed the volunteers. Ironically, these un hospitable statements have generally emanated from the most prosperous underdeveloped areas of the country. It seems as if at least some of these local officials are not anxious to share the credit for continuing development with anyone and particularly not with the federal government. This is especially so in progressing backward areas where traditional patronizing leaders jealously guard their political positions against outside encroachments and can afford to continue doing so. It is also true, however, that the poorest areas of the country are the most politically conservative and economically dependent, and, therefore, generally support the Government and its programs.

The few disparaging politicians are not important to the overall determination of Project Rondon's future or success. Organized student opposition to the Program, conversely, could seriously disrupt the operation of the program. At present, however, the most potent student groups, such as the outlawed but functioning National Students Union (UNE—União Nacional dos Estudantes) and Popular Action (AP—Ação Popular) have confined their activities almost entirely to general anti-Government protests and demands for university reforms. While these student organizations have infrequently criticized Project Rondon, their few pronouncements on the subject have been relatively mild and, so far, have had little effect on the program. Large groups of students have not been dissuaded from applying. During Rondon II the Central Directory of Students of the Federal University of Minas Gerais did manage to organize a partially successful boycott of Project Rondon. The Central Directory

¹² Cooperation, such as joint projects, between the volunteers from a developed country and domestic volunteers from the host country has been accomplished elsewhere. Operations of the Corps for Progress and the Peace Corps in El Salvador, for example, have been integrated.

¹³ "Prefeitura de Petrópolis acusada por estudantes de boicotar o Projecto Rondon," *Jornal do Brasil*, July 25, 1968.

claimed that Project Rondon was part of a plot by the Government to militarize Brazilian education in accordance with dictates from the United States Department of Defense. The Directory charged Project Rondon was attempting to combat student attempts at liberating Brazil from the foreign yoke. According to the student leaders from Minas, Project Rondon was also spreading political values which would make it more difficult for the rural population to prepare themselves to live as free men liberated from the imperialist mentality. They intimated that reports written by Rondon I participants were being used by the Government for some devious but unspecified purpose unconnected with the announced goal of economic and social assistance to the rural population. The sum of the *mineiros* complaints indicated that they were opposed to what they considered were the anti-nationalist characteristics and ambitions of the program. If these sentiments were to gain adherents among large numbers of Brazilian university students, it is clear that Project Rondon would be severely crippled if not completely destroyed.

V

STUDENTS WHO HAVE PARTICIPATED in Project Rondon generally have praised the program warmly. Naturally, some minor complaints are voiced. For instance, some returning volunteers feel that they have not been given enough field support, did not know how they were to get to their assigned areas, or did not have a complete understanding of their role before they were placed in the interior. These organizational lamentations are not of the type that would hinder the continuation or growth of the program. Indicative of the constructive nature of the criticisms is the readiness of many former volunteers to serve as student leaders of new projects.¹⁴

Evidently the Government of President Costa e Silva believed that Project Rondon had been a successful program innovation. Exalted words of praise for the organization came down from the President himself. Senhor Costa e Silva, in one of his many statements about the program, claimed, for example, that Project Rondon was an historic point in Brazil's development.

The Government is particularly delighted that other developing countries have taken note of the Brazilian experiment. Mexico already has sent a mission to Brazil for the purpose of examining Project Rondon, and other countries have shown interest in directly observing the program too. Not content merely to have other nations imitate the program, the

¹⁴ Twenty percent of each Project is composed of former volunteers who serve as group leaders.

Brazilian Government has decided to expand Project Rondon and to initiate similar schemes. Operation Mauá, for instance, has been created by the federal government on the basis of the Rondon model. The new program is employing student volunteers in the development of transportation projects such as roads, harbors, and railroads.¹⁵ Five hundred engineering students already have been sent to the state of Maranhão to begin a program of visits and classes dealing with road construction. Meanwhile, Project Rondon has been established as a permanent institution by the Government and has been given additional support and encouragement. The Ministry of Foreign Affairs, for example, decided to require students at the Ministry-operated school for diplomats, the Rio Branco Institute, to participate in Rondon III.

The reactions of many returning volunteers seems to indicate that the Government's hopes for Project Rondon have, indeed, been justified. For example, geology student Celso Gomes Hubner claims that before participating in Project Rondon he had a different and poorly informed conception of the "Green Hell." He now says that he appreciates the great potential of the Brazilian interior. Returning volunteer Gustavo Zenelli, a medical student, has come to believe that all who can give a little of their time and attention to the immense problems of the interior must do so. The problems of the Amazon, according to Zenelli, can be solved only if every generation helps to fight for solutions not with words but with facts, persistence, and dedication. Another former participant, engineering student Enio Rossi Corsetti, states that as a result of his Rondon experience he has learned that the army is not entirely evil and commends it for being the only institution preserving the Amazon for Brazil. Corsetti feels that the army behaves differently in the Amazon than it does in the cities and concludes that the military leaves aside tanks, guns, and parades and, in the interior, replaces them with tractors, shovels, and bricks.¹⁶

Certainly the Brazilian Government has reason to be satisfied with Project Rondon, but the self congratulations may be a bit premature. The inhabitants of the interior have been assisted only marginally, and only a small amount of student talent has been mobilized for the development

¹⁵ Competition for the Government party's 1970 presidential nomination currently centers around former Interior Minister General Alfonso Augusto de Albuquerque Lima and Minister of Transportation Coronel Mario David Andreazza. It is interesting to note that the Transport Minister has been quick to copy the former Interior Minister's Rondon innovation.

¹⁶ "Projeto Rondon mostrou pequena dimensão da vida humana na Amazônia," *Jornal do Brasil*, March 10, 1968.

effort. The long range repercussions remain unknown and still a subject for speculation. The real test of success as defined by the project's planners is whether or not the students have increased their respect for the Brazilian political system and their tolerance for the present Government. No one yet knows how student attitudes will be affected or whether they will be affected at all by Project Rondon.

Will the returning volunteers increase or decrease their political activism? Will they protect and support the Government or will they increase their resistance to it? Will they turn their efforts to less political development tasks or decide that the entire political system must be reformed or revolutionized before their energies can be successfully applied to development? Can Project Rondon continue to attract students while the Government harshly represses student political opposition? And what of the newly mobilized frontier dwellers and peasants. Will they continue to be politically passive and apathetic or will they begin to make demands upon the Government as a result of their contact with politically conscious students? Will the Government be willing or able to satisfy these demands? Only when these and other associated questions are answered will the success or failure of Project Rondon really be measurable.

VI

IT IS CERTAINLY POSSIBLE that the students will increase their antagonism for the military Government in spite of their admiration for Project Rondon. In fact, after recognizing the true scope of Brazil's problems, the students may no longer be content merely with opposing the leaders of the present Government but may see the necessity of destroying the entire political system. They may decide that Brazil needs much more than educational reform and a reduction of repression and that Brazil requires new leadership, new policies and also different political institutions and values. Very few observers would argue, for instance, that returning Peace Corps volunteers or Vista participants are less politically active or satisfied with United States Government policies or leadership than when they began their service. Is there any reason to believe that students exposed to the experiences of Project Rondon will behave differently upon their return to the campus than their American colleagues? In addition, even if several thousand Project Rondon participants become more "constructive" or "responsible" in their actions, this may not insure an alteration in the orientation of the student movement or a change in the attitudes of non-participants who compose the majority of Brazil's student population.

Professor Samuel P. Huntington, in his excellent new book *Political*

Order in Changing Societies, declares that "Student opposition can only be marginally influenced by reforms or ameliorative government actions. It exists virtually independent of the nature of the government in the society and of the nature of the policies which the government pursues."¹⁷ If, as Huntington suggests, the university students are always in revolt no matter what the government tries to do in order to alleviate this situation, then perhaps the Brazilian Government would be wise to expend its efforts elsewhere and build alliances with other political groups. Programs designed to affect students, such as Project Rondon, may intensify latent guilt feelings and thus increase oppositional tendencies. On the other hand, potential revolutionaries and other dissidents may be reduced in number and strength if some of them are given national leadership positions. The tactic of broadening leadership has been effectively employed by governments in other developing nations and has reduced the revolutionary fervor or potency of malcontented groups. The problem with students is unique because they are generally considered too young and inexperienced to hold important public offices. It is possible that the leadership roles given former Rondon volunteers in new projects may have a moderating effect upon them, but the limited nature of the leadership experience may not be appropriate nor the numbers of students affected enough. While the Brazilian Government is committed to the idea of student responsibility, it is not persuaded that students should participate in national decisions.¹⁸

This does not mean that Project Rondon will be a complete failure. The peasants of Brazil, if satisfied, might prove a willing member of a political alliance designed to insure the continuance of the present political system and values. Technical assistance provided by Project Rondon students, together with land reform, could transform the peasants from a politically apathetic and potentially revolutionary group into a conservative stabilizing political force. Former Rondon participants might not support the regime or the political system, but the subjects of their efforts might support them. It must be emphasized that land reform would also be necessary and the 1964 "Revolution," of which the present Brazilian Government is an inheritor, was staged partially to prevent a thorough land redistribution. Another note of caution is also advisable. Rural in-

¹⁷ Samuel P. Huntington, *Political Order in Changing Societies* (New Haven: Yale University Press, 1968), p. 369.

¹⁸ At the beginning of 1969 it was announced that former Project Rondon participants would be trained by the Interior Ministry to "take up administrative and technical assignments in the territories of Roraima and Amapa, including the top jobs." The exact nature of the positions and the number of students affected remains unknown to this writer. "Youths Rewarded," *Brazilian Bulletin*, January, 1969.

habitants are now outnumbered by urban dwellers in Brazil and a peasant—plantation owner—military coalition might not be powerful enough to long persevere against a political challenge launched by a proletarian—urban middle class—intellectual alliance. If the military is divided or abstains in such a contest the more traditional and rural elements might even be defeated.

Much of the above is merely conjecture. The most that can be said with any degree of certainty by an objective observer at this time is that a partial attempt at a dialogue with students has been initiated by the Government, and a calculated, although perhaps not a well calculated, risk has been taken. It is somewhat ironic that Project Rondon survives, and, at the same time, students in the cities intensify their antipathy for the Government. Whether or not Project Rondon will continue to meet all or any of its sponsors' expectations is uncertain. However, the prediction and hope of the usually balanced and politically moderate *Jornal do Brasil*, that Project Rondon "will be the spear-head of the great, important Brazilian Revolution"¹⁹ may be overly optimistic. This is not to deny that the program can make a marginal or even important contribution to the economic and social development of Brazil.²⁰

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¹⁹ "Quem integra não entrega," *Jornal do Brasil*, August 9, 1968.

²⁰ The Brazilian magazine *Veja* has reported that Rondon volunteers have already constructed 1,000 homes and treated 600,000 patients in poverty areas.

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Assessing Land Values

THE AMERICAN PRACTICE of taxing the improved value of properties is being increasingly criticized as not suited to the needs of contemporary society. Much has been claimed for a site value tax as an alternative to the present property tax, and support for it appears to be growing. A volume from the Committee on Taxation, Resources and Economic Development (TRED) edited by Daniel M. Holland and published at \$10 by the University of Wisconsin Press, *The Assessment of Land Value*, explores the feasibility of implementing such an alternative. It reports the proceedings of a symposium sponsored by TRED.

Proponents of the site value tax see it as an aid in encouraging construction and in alleviating distorted development patterns, such as suburban sprawl and inner city decay. Critics, however, claim that site and improvement values have become so inseparably blended that the tax would be impossible to implement. Moreover, they argue, were land value alone the base, an inordinately high tax rate would be required.

In *The Assessment of Land Value* 12 students of public finance, assessors and planners—all recognized experts in their fields—consider whether modern assessment practice is capable of assessing land values with sufficient accuracy to make the site value tax administrable. They also address themselves to the legal and transitional problems which would develop in changing to a site value tax and consider the prospects that revenue would be adequate to cover necessary government costs under such a tax.

The Assessment of Land Value will be of interest and assistance to scholars in economics, business, public finance and administration, political science, planning, and urban affairs, and to practicing lawyers, municipal and county administrators, planners, assessors, bankers, developers and others concerned with the role of property taxation in social development.

Contents: Introduction, Daniel M. Holland. Can Land Be Assessed for Purposes of Site Value Taxation? Ursula K. Hicks. Defining Land Value for Taxation Purposes, William S. Vickrey. Land Value Taxation in Light of Current Assessment Theory and Practice, Kenneth Back. Reckoning With Imperfections in the Land Market, John M. Copes. Preparation and Use of Land Value Maps, Donald R. Deach. Estimating Residential Land Value by Multivariate Analysis, Paul B. Downing. A Computerized Assessment Program, Ted Gwartney. Legal Problems and Obstacles in Assessing Land for Site Value Taxation, Arthur D. Lynn Jr. Adequacy of Land as a Tax Base, Mason Gaffney. Transition to Land Value Taxation, C. Lowell Harriss. Conference Summary, David Black. [From the Publisher.]

Urbanization and New Housing Construction in the Soviet Union*

By LEON M. HERMAN

IN THE SOVIET UNION the process of urbanization has been advancing at a rapid pace during the past four decades. When the Soviet Government took its own first census—in 1926—the results showed that 82 per cent of the population still lived in rural areas. A perceptible movement of people from the villages toward the cities had been underway in Russia for some time, namely since the process of industrialization began during the 1880s. However, the full effect of this movement was not reflected in the population record before the end of the fourth decade of the present century. By the time of the 1939 census, one third of Russia's population had become city dwellers.

I

Dimensions of the Inherited Housing Problem

THE CONSTRUCTION OF NEW HOUSING ranked rather low as an investment activity in the official Soviet scheme of things during the 25 years of the Stalin regime.¹ Most recent Soviet leaders have agreed, in their public statements, that the dimensions of the housing problem inherited from the Stalin period were staggering. The State-owned urban housing fund, which had increased by 185 per cent between 1913 and 1950, was so severely strained during the 50s as to compel the municipal authorities to reduce the allocation of living space per person from 9 to 5 square meters. As a result, most urban apartments in the large, rapidly growing cities have long functioned in the form of communal housing, requiring

* Leon M. Herman completed a longer study of "Urbanization and New Housing Construction in the U.S.S.R." and was about to prepare an article from it for the *American Journal of Economics & Sociology* when his untimely passing occurred on May 31, 1969. Augusta Herman, his wife, who worked closely with him over the years, completed his task. Mr. Herman was born in Poland in 1905. He took his bachelor's degree at Long Island University in 1932 and his master's at the University of Chicago in 1935. The following year he joined the research staff of the U.S. Treasury Department, transferring to the Commerce Department in 1942. He left Commerce to become senior specialist of the Legislative Reference Service at the Library of Congress in 1958. (The opinions expressed are his own and were not necessarily shared by his colleagues at the Library of Congress.) Since 1959 he had also been adjunct professor of Soviet affairs at American University's School of International Service. For many years Leon Herman was in the front ranks of American economists specializing in the study of the Soviet economy. His work, the product of comprehensive investigation, painstaking analysis and critical but objective judgment, stands as a memorial to one of the most respected scholars in the field of Soviet studies.—EDITOR.

¹ *Pravda*, May 12, 1964.

the occupants to share the available living space, along with the kitchen and bathroom facilities.

After the beginning of comprehensive economic planning in the U.S.S.R. in 1928, with its primary emphasis on industrial growth, investment in housing construction declined sharply as a proportion of the total capital outlay of the national economy. The downgrading of this sector was reflected in a drop from a share of 22.2 per cent allocated during 1918-28 to 11.7 per cent of all new investment for the period of the first five-year plan.²

Table 1
HOUSING SPACE AND URBAN POPULATION IN THE USSR
[Data as of the end of year]

	1926	1955	Index of Growth
Urban Housing Space (in million square meters)	216	640	300
Urban Population (in millions)	26.3	88.2	335

SOURCES: *Narodnoe Khoziaistvo SSSR v 1956 Godu*, p. 177;

Narodnoe Khoziaistvo SSSR v 1965 Godu, p. 7.

As a result, the housing stock in the cities declined relative to the number of inhabitants. Viewed on a per capita basis, available living space³ was calculated at 4.67 square meters in 1950 (4.78 in 1955), as compared with 5.85 in 1926.⁴

II

The Beginning of the Current Building Program

DURING THE EARLY 1950s, the Soviet Government was still spending annually only about 2 billion rubles, or 30 rubles (\$33) per urban inhabitant, on the construction of new housing. Four years after Khrushchev's accession to power, the new First Secretary of the Communist Party of the Soviet Union (CPSU) launched a major campaign for the improvement of housing conditions in the urban centers of the nation. In a decree issued on July 31, 1957, the leaders of the Communist Party and the Government committed themselves to a program of greatly expanded residential construction.

² T. Sosnovy, in Joint Economic Committee, U.S. Congress, *Dimensions of Soviet Economic Power*, Washington, 1962, p. 329.

³ The living space of an apartment, according to Soviet usage, includes the bedrooms and living rooms only, while total ("useful") floor space measures the whole of the interior of the apartment, including kitchen, bathroom, and corridors. As a rough proportion, living space takes up some 65-70 per cent of the total ("useful") space of an apartment.

⁴ *Dimensions of Soviet Economic Power*, Washington, 1962, p. 331.

The decree ordered an immediate increase of 100 per cent in the volume of new housing to be built during the current five-year plan period (1956-60), as compared with the amount completed during the preceding five-year span.

The decree, furthermore, outlined some of the measures contemplated by the Government to bring about a systematic conversion of existing methods of building apartment houses to the new industrialized techniques. These measures, explicitly, called for a far-reaching transformation of the construction industry, including the character of its supply base as well as the methods used in the manufacture of building materials.⁵

Since 1957, the major urban centers of the Soviet Union have witnessed the rapid rise of large complexes of new apartment houses (called "massives") built on cleared stretches of unoccupied land, for the most part in the outlying areas of the city. These new urban housing complexes are built on a mass scale, with provision made for the simultaneous construction of schoolhouses, preschool facilities, stores and other accommodations essential for the service of the residents.

Table 2

NEW HOUSING BUILT IN THE SOVIET UNION SINCE WORLD WAR II*
(in million square meters)

1946-1950	1951-1955	1956-1960	1961-1965	1966	1967
200.9	240.5	474.1	490.6	102.1	103.1

* Includes housing financed by the State, cooperatives, private urban residents and collective farms personnel.

SOURCE: SSSR v *Tsifrabk. v 1967 Godu*, Moscow, 1968, p. 136.

III

The Making of a Construction Materials Industry

AT THE BEGINNING of the present campaign for increased residential building, Soviet authorities reported that there were more than 100,000 individual construction projects underway in the various regions of the country. Building activity was fragmented. The available inventory of construction equipment was widely scattered; construction schedules were enforced rather loosely. Inevitably, overhead staffs were excessive, and the costs of construction inordinately high.

Beginning of Modernization Process. During the late 50s the Soviet Government initiated a drastic reorganization of the building industry. The

⁵ *Zhiliishchnoe Stroitelstvo*, No. 11, 1967, p. 12.

drive began with a series of separate measures providing for the establishment of new productive capacities for the production of pre-fabricated component parts, which was followed in due time by a landmark decree, published in 1959, calling for a shift toward the use of "the progressive" method of construction by means of precast large panel component elements. This initiative was followed by a parallel effort on the part of the central construction planning agencies to begin the preparation of (a) several standard architectural designs for modern factories capable of mass producing precast concrete component parts; and (b) a series of standard designs for apartment houses to be built by the large panel method. Specialized equipment for the pre-fabrication of sectional concrete building components also began to be designed and produced.

The productive capacity of this new industry expanded at a rapid pace. In 1959, the U.S.S.R. already had a total of 1,851 plants engaged in the production of sectional precast concrete elements. By 1965, the production base of the industry increased to 2,305 plants, including a sizeable proportion of large scale enterprises. As shown in Table 3, plants producing between 10,000 and 70,000 cubic meters of sectional components accounted for over 60 per cent of total output in 1965.

Table 3
PRODUCTION OF SECTIONAL PRECAST CONCRETE COMPONENTS
by enterprises of varying capacity

Annual volume of Output (in 1000 M ³)*		1959		1965	
		Number of enterprises	Share of total output (%)	Number of enterprises	Share of total output (%)
To 10		1215	19.1	1201	11.9
From 10.1 to 20		289	17.1	482	17
From 20.1 to 40		218	26.1	354	23.4
From 40.1 to 70		85	16.6	186	20.2
From 70.1 to 100		24	6.9	41	11.2
From 100.1 to 200		18	17.2	33	11.7
Over 200		2	2	0	1.6
Total		1851	100	2305	100

* Excluding small polygons and production at building sites.

SOURCE: A. S. Boldyrev, ed., *Promyshlennost' stroitel'nykh materialov*, Moscow, 1967, p. 81.

Thus by the middle of the 60s the Soviet Union had at its disposal well over 2,000 modern, mechanized plants for the production of precast con-

crete components. New capacity continues to be added, averaging some 40 new plants a year, capable of producing over 5 million cubic meters. And for the industry as a whole, total annual capacity reached a figure of 63 million cubic meters of concrete components in 1966.

The fixed capital of this new industry is officially placed at a value of 3,580 million rubles (about \$7 billion). New investment is at an annual rate of some 257 million rubles. As far as employment is concerned, the industry is reported to have a labor force of 700,000 persons, including 65,000 employees in the engineering and technician category. Total annual production currently amounts to 3,590 million rubles.⁶

In terms of its daily output of finished product, the precast concrete industry of the U.S.S.R. turns out an average of 200,00 cubic meters of building components, ready for shipment to the construction sites of the country.

Industry economists in the Soviet Union have calculated that the use of precast concrete components is currently saving the State 900 million rubles (\$1 billion) a year, which is equal to 4 per cent of the value of all new buildings. This amount reportedly includes the annual savings of 10 million tons of steel, 35 million cubic meters of lumber, 9 million units of brick, 30 million square meters of dry wall, along with other types of standard building material.⁷

In order to accelerate, in particular, the large-panel building method, the Soviet Union has erected within the past dozen years some 275 specialized factories with an aggregate capacity of 17 million square meters of finished housing space.⁸

Table 4

PRODUCTION OF CEMENT AND PRECAST CONCRETE COMPOUNDS

	1955	1960	1965
Cement (in million metric tons)	22.5	45.5	72.4
Precast Concrete Components (in million cubic meters)			
Total	5.3	32.4	63.1
Wall panels included	—	0.954	6.325

SOURCE: Zhilishchnoe Stroitelstvo, No. 11, 1967, p. 16.

Within the past few years, a new type of enterprise has been developed,

⁶ *Stroitel'naya Gazeta*, July 15, 1966, p. 2. At the official rate of exchange, one ruble is valued at \$1.11; converted at its purchasing power equivalent in the construction industry in particular, one ruble is generally valued at \$2.

⁷ *Ibid.*

⁸ Boldyrev, ed., *Promyshlennost*, etc., p. 83.

known as the house-building combine (DSK). It originated in Leningrad. There are now 80 of these units in operation, capable of annual output of 7.5 million square meters of living space. The typical "combine" encompasses under its jurisdiction the pre-fabricating plants as well as the building sites.

The "combine," as a rule, does not maintain warehouses at the building site and, therefore, must do its assembly work, as it were, "from the wheels." This helps to reduce the amount of loading and unloading work at the site. Instead, truck services are generally required to constitute an integral part of the operation and are used continuously to support the activities of the builders. This form of building makes it possible to reduce labor consumption by 40 per cent, while building time is reduced about 30 per cent.⁹

Table 5
PRODUCTION OF PRECAST CONCRETE COMPONENTS, 1950-1966
[million cubic meters]

1955	5.0
1958	18.0
1960	30.2
1961	35.9
1962	41.9
1963	45.7
1964	50.0
1965	56.1
1966	63.08
1967	70.1
1970 (Plan)	80.0

SOURCE: Statistical yearbooks of the U.S.S.R.

Recent Improvements in Design. During its early phase, the large panel method of house building drew a good deal of criticism from the Soviet citizen as well as the foreign observer, mainly on the grounds of the quality and design of the finished apartment. The residents complained about both the inadequate size and the equipment of the kitchen, the primitive plumbing, and the underheated living and dining rooms.

Soviet specialists appear to be confident that "in the long run the opportunities for improving the quality of construction in general, and finishing work of the interior in particular, are better in the case of the concrete panel method than in conventional brick construction. They point to the fact that large panel construction has successfully passed out

⁹ *Ibid.*

of the experimentation phase to become the accepted method of providing new housing space for the growing population of the Soviet cities. The figures used to illustrate the trend in that direction are shown in Table 6.

Table 6
NEW URBAN HOUSING SPACE, 1959-1966
(in million square meters)

	1959	1960	1961	1962	1963	1964	1965	1966
New urban housing space, total	53.5	55.8	56.6	59.8	61.9	58.9	63.2	65.2
Large panel buildings included	0.78	1.97	5.2	9.1	12.5	14.7	18.7	20.5
Per cent of large panel in total new housing	1.5	3.5	9.2	15.2	20.2	25	30	31.5

In their continued search for better ways, Soviet architects have encountered no technical difficulties in changing their designs from the standard five-story building to structures rising as many as 9, 12 and 16 stories high.¹⁰

IV

Public Investment in New Urban Housing

Housing as a claimant upon public funds. The capital outlay of the Soviet Government on new residential construction in the cities has been rising, although somewhat uncertainly, since the mid-50s. Between 1956 and 1960, for example, the annual outlay rose from 2.9 to 5.5 billion rubles. Viewed as a per cent of total capital investment by the State, this was a notable advance, namely from 15.4 to 18.0 per cent. Construction materials output has risen accordingly.

Thereafter, the absolute figure for State expenditures on urban housing continued to move upward, as shown by the recorded rise from 5.4 in 1961 to 7.1 billion rubles in 1966. But the momentum of the rise was not very impressive, in as much as the share of housing in the State's total economic outlay in fact declined during this 5-year period from 17.0 per cent to the 1966 figure of 15.5 per cent.¹¹

For the current five-year plan (1966-1970) average yearly outlays are planned to run at a rate of 15 billion rubles, and the annual share of housing in total new investment in the economy is projected to reach 25 per cent.¹²

¹⁰ *Zhiliishchnoe Stroitelstvo*, No. 11, 1967, p. 16.

¹¹ *Strana Sovetov za 50 Let.*, Moscow, 1967, p. 203.

¹² Radio Moscow, domestic service, interview with I. A. Ganichev. Presumably, this

When the current five-year plan period came to an end, in 1970, the urban housing fund, public plus private, was planned to show a gain of 480 million square meters. On a yearly average, this would come to 96 million square meters of new housing, as against 76 million per annum added during 1961-65.

Table 7
MAJOR STATE CAPITAL EXPENDITURES OF THE U.S.S.R.

	1960	1965	1966	1967
		(in billion rubles)		
Industrial investment	12.6	17.6	18.5	19.4 ²
Agricultural investment	2.5	5.3	5.7	6.2
Defense expenditures	9.3	12.8	13.4	14.5
Housing construction	5.5	6.3	7.1	7.9 ²
Scientific research ¹	3.3	5.7	6.8	7.2
Total	33.2	47.7	51.5	55.2
	1960	1965	1966	1967
		(in per cent)		
Industrial investment	37.9	36.9	35.9	35.1
Agricultural investment	7.5	11.1	11.1	11.2
Defense expenditures	28.0	26.8	26.0	26.3
Housing construction	16.6	13.2	13.8	14.3
Scientific research	9.9	11.9	13.2	13.0
Total	100.0	100.0	100.0	100.0

¹ Including some expenditures made directly by enterprises.

² Estimated figures.

SOURCE: Statistical yearbooks of the U.S.S.R.

To date, expressed in terms of completed urban apartments, the additions made during the years 1966 and 1967 amounted to 1.85 and 1.9 million units, respectively.

The costs of construction. As a result of the widespread use of industrial methods, the industry has succeeded in bringing down the cost of housing construction. The amount of labor used at the building site in large panel residential construction comes on the average to 35-40 per cent less than in the case of building brick masonry of the same area. Building time "in most cases" is regularly reduced by between one-third and one-half as

refers to urban housing as a whole, including privately financed. To make this figure comparable, it should be noted that it corresponds to the recorded share of 20.9 per cent for 1961 and 17.2 per cent for 1966.

¹³ *Zhiliubchnoe Stroitelstvo*, No. 11, 1967, p. 12.

Table 8

BUILDING INDUSTRY'S MACHINERY INVENTORY, 1950-1967
(in 1000 units; end of year figures)

	1950	1960	1965	1966	1967
Excavators	5.9	36.8	69.2	75.4	81.0
Scrapers	3.0	12.2	20.1	21.5	22.7
Bulldozers	3.0	40.5	68.5	74.0	79.1
Mobile cranes	5.6	55.0	83.3	90.0	96.6

SOURCE: SSSR V *Tsifrabk V 1967 Godu*, p. 110.

Expressed in dollars, at the ruble-dollar ratio generally used for this industry (\$2/1 ruble), the cost, for the large-panel method in particular, is somewhere near \$22 per square foot of housing.

One phenomenon that tends to raise the cost of building in the Soviet Union is the continued heavy incidence of manual labor in the construction industry.¹⁴

Upward creeping building costs are reported to be confronting the authorities from another direction. It seems that while notable results in efficiency have been attained in recent years by the increased mechanization of home building, some of the economies achieved are offset by the rising cost of machinery.¹⁵

On the whole, the process of mechanization has been proceeding rather unevenly in the industry. As one example, technological progress seems to have altogether by-passed the production of bricks. This despite the fact that, as noted recently by *Pravda*, "Soviet builders will be using brick for a long time to come." Yet, this sector of production remains neglected. Manual labor remains prevalent; working conditions are difficult, wages are low, and labor turnover is high. According to *Pravda*, "Experience abroad has shown that it is possible to set up small but fully mechanized and automated brick plants in all parts of our country without a large capital outlay."¹⁶ Furthermore, the building industry, like many others, is regularly shortchanged on its urgent requests for railroad cars and trucks from the central ministries in charge of allocating these scarce facilities.

¹⁴ I. A. Slepov, *Tekhnicheski Progress i Organizatsia Stroitel'nogo Proizvodstva* (Technical Progress and the Organization of the Construction Industry), Moscow, 1965, p. 13.

¹⁵ *Ekonomicheskaya Gazeta*, No. 23, June 1966, p. 38.

¹⁶ *Pravda*, November 12, 1968. See also article by I. Ganichev in *Trud*, January 19, 1968. The author is a high level construction specialist who asserts that most building machinery now being produced in the U.S.S.R. is of relatively low capacity because the production ministries in question "have an obsolete notion of what constitutes modern construction equipment."

V

Types of Housing Ownership

State-owned housing. The bulk of the housing in the cities of the Soviet Union is owned by the State. Agencies of the State, furthermore, continue to account for most of the new urban dwelling units being built today, although private individuals and, more recently, employee cooperatives are also permitted to build and own residential structures.

Table 9

URBAN HOUSING CONSTRUCTION IN THE U.S.S.R.
(in million square meters* of total ["useful"] space)

	1951-55	1956-60	1961-65	1966	1967
Built by the State	113.0	224.0	300.4	65.9	76.6
Built by individuals	65.1	113.8	94.0	15.9	16.8
Total	178.1	337.8	394.4	81.8	93.4
Private housing as per cent of total	36.5	33.7	23.8	19.4	18.0

* One square meter equals 10.75 square feet.

SOURCE: *Strana Sovetov Za 50 Let*, Moscow, 1957, p. 245; SSSR *v, T'sifrakh v 1957 Godu*, Moscow, 1958, p. 136.

By reason of its scarcity, housing has always been considered in the Soviet Union as an important fringe benefit for industrial and other employees of the State. Today, good housing continues to be regarded as a prime factor in helping enterprises to attract and maintain a stable labor force. Hence, important industries, research organizations and administrative agencies engaged in high priority projects are often allocated larger building funds in order to help them to provide a better housing standard for their personnel.

The amount of capital to be invested in housing by the State in a given year, as would be expected, is large enough an outlay to be under the jurisdiction of the central authorities of the U.S.S.R. As a matter of administrative practice, the planning of State investment in housing and related communal facilities has been maintained since 1959 as an independent area of activity, separate from construction of industrial installations. Yet, the center, i.e. Moscow, becomes involved in all activities concerned with the investment of capital as well as the allocation of building materials, wherever it originates.¹⁷

During the early decades of the Soviet period the share of the State in the available stock of urban housing began to rise rapidly. By 1940, State

¹⁷ *Ekonomicheskaya Gazeta*, No. 14, 1968, p. 2.

housing accounted for 63.4 per cent of all the residential space available in the cities, as compared with 47.2 per cent in 1928. In part, it may be noted, this increase was accelerated by the housing reform of 1937, which transferred to the State sector most, but not all, of the cooperatively owned apartment houses built during the first two decades of the Soviet regime.

Private Housing. Private individuals in the Soviet Union are permitted to build single-family dwelling units at their own expense, subject to the supervision of the municipal authorities who are responsible for the approval of the design, and the designation of the site. The form of construction is also subject to certain restrictions.¹⁸ During the pre-war years, privately-owned housing contributed, on the average, some 3 million square meters of dwelling space per year, while State agencies added annually about 11 million meters of useful housing space.

For a number of years after the end of World War II, the Soviet Government exhibited a tolerant attitude toward the practice of individual home construction. Housing space was extremely scarce in most parts of the country, so that additions made to the housing stock in general, whatever the source, were publicly welcomed by Soviet officialdom. For a time, during the 50s, the authorities in fact sought to encourage private building by extending credits to the prospective home builders through the State Construction Bank.

More recently, however, private construction has lost favor with the central authorities for a variety of reasons. The leadership appears to have objected chiefly to the fact that it created a wide variety of opportunities for multiple building activities by enterprising individuals, for resale, speculation, and unearned income. Accordingly, the high target for private housing written into the seven-year plan (1959-65) failed to be fulfilled.¹⁹

The formal call for restraint upon private home building came in a decree published by the Soviet Government on August 6, 1962, under the heading "On Individual and Cooperative Housing Construction." In this decree, the authorities asserted that the time had come "to discontinue the allocation of land plots for individual housing construction . . . and the issuing of credits to individual builders" in the major cities of the country, specifically in the capital cities of the constituent republics.²⁰

¹⁸ *Sputnik Profgrupporga* (Guide of Trade Union Group Organizer), Moscow, 1960, p. 235.

¹⁹ Joint Economic Committee, *New Directions in the Soviet Economy*, Washington, 1966, p. 541.

²⁰ *Pravda*, August 7, 1962.

The effect of this decree was not slow in coming. Privately built housing, which reached a peak of 27.2 million square meters in 1959, declined to 20.9 in 1962, falling thereafter to 16.2 million square meters in 1964.

Although restrictive measures against individually-built housing have been eased somewhat since the retirement of Nikita S. Khrushchev in October 1964, this form of construction has not regained its former vigor. In 1966, for example, it accounted for 20.6 per cent of all new housing built in the cities, as against 33.7 per cent in 1959.²¹

Cooperative housing. Personal income has risen sufficiently in the Soviet Union in recent years to create a demand among some elements of the population for better housing. These higher paid employees are evidently able and willing to pay a higher monthly rent than most citizens are now paying for the housing they rent from the State. This rising trend in income has brought considerable pressure to bear upon the Soviet Government to help organize housing construction on a cooperative basis, using for that purpose the private savings of the membership rather than State funds. A government decree finally came on June 1, 1962 under the heading of "On Individual and Cooperative Housing Construction" which provided, among other things, that members of a housing cooperative must agree to place their organization under the supervision of existing housing administration authorities, such as that of the municipal authorities, industrial enterprises, or other governmental establishments.

From the viewpoint of the Soviet Government, the cooperative mode of house-building has two notable advantages. In the first place, it helps to reduce total demand for State-subsidized housing. Secondly, it serves to sop up substantial amounts of purchasing power in the hands of the high-income groups of its population.

In general, the technical procedures of the house-building cooperatives are expected to be worked out in close coordination with the standard designs, cost estimates, and time schedules of the regular housing construction agencies of the State.

The process of establishing a cooperative begins with the deposit by the membership of funds amounting to at least 40 per cent of the estimated cost of construction. This payment is to be made to the State Construction Bank as a basis for obtaining the necessary credit for the balance of the expenditures. The credit, usually covering 60 per cent of the estimated cost of construction, is to be extended for a period of 10 to 15 years, with an interest charge of 1 to 2 per cent. Land for cooperative

²¹ *Ekonomicheskaja Gazeta*, No. 39, 1967, p. 29.

apartment building must be allocated in regions equipped with roads, water mains, sewers, and electric power lines.²²

House building cooperatives began to add to the total urban stock of new housing on a modest scale in 1963, providing in that year 1.8 million square meters of floor space. This figure rose to 4.8 million square meters in 1964 and 7.0 in 1966.²³

Thus, cooperatively owned housing accounted for 13.5 per cent of all new urban apartments built in 1967, as compared with 3 per cent in 1963.²⁴

Typically, according to one informal account, the member of a house-building cooperative purchases his apartment at a rate of 100 rubles (\$110 at the official rate of exchange) per square meter. For an apartment measuring 60 square meters the full cost would thus be 6,000 rubles. His down payment must cover 40 per cent of the total cost, while the rest is paid off in 10 (or 15) equal yearly installments.²⁵

The task of allocating space in finished cooperative apartment houses also falls under the authority of the housing agencies of the local municipal councils. The latter are expected to use as the basis for their decision such criteria as the nature of the work of each member of the family, personal rights to additional space, etc. In addition, the local authorities are responsible for enforcing some agreed upon "norm" for living space per person in a cooperative unit. Thus, for example, a family of two would be assigned to an apartment having a total floor space of, say, 24 square meters, which is considerably in excess of the "norm" for State housing.

A new family moving into a cooperative apartment house may leave behind some of its members who would continue to occupy the apartment (or room) formerly occupied by the whole family, if the space in question does not exceed the space allotment per person prevailing in the given city.²⁶

In practice, conflicts of interest often arise between members of the home-building cooperatives and the municipal authorities. The latter are usually hard pressed to find housing space for people on their long waiting list. Accordingly, the local authorities appear to reserve the right to issue a certificate of occupancy to persons who are not members of the coopera-

²² *Pravda*, August 7, 1962.

²³ V. T. Robotov, *Financing and Crediting Housing Construction* (in Russian), Moscow, 1967, p. 108.

²⁴ D. Pudikov, *Ekonomicheskaya Gazeta*, No. 29, 1967, p. 29.

²⁵ *Washington Post*, September 19, 1968, p. G-12.

²⁶ *Ekonomicheskaya Gazeta*, No. 6, 1968, p. 28.

tive, if they can determine that a particular member is not in urgent need of new housing.²⁷

During 1968, newly built cooperative housing came to a total of 6.9 million square meters, with a planned figure of 8.5 million for 1969. The amount of credit extended by the State to housing cooperatives during the year was reported at 410 million rubles, a figure that was raised in the plan for 1969 by 22 per cent, namely to 500 million rubles.²⁸

VI

The Situation Today

Allocated housing at low rents. Under present stringent conditions of supply, housing space in the cities of the Soviet Union continues to be rationed. Tenants of new apartments are allotted space, as a rule, on the basis of the size and need of the family. The authorities are currently using for that purpose a "housing norm," or ration, of 7 square meters of living space per person.²⁹

By way of compensation, however, rents are unusually low. The established monthly rate for residential space is 0.13 rubles per square meter. At this rate, a family of four assigned to an apartment measuring 30 square meters, for example, would pay some 4 rubles per month. Payment for utilities has to be made separately but there is no systematic information on such charges.

How does the monthly outlay on rent look in relation to average earnings in industry? The average monthly wage in the economy as a whole was 103 rubles for the year 1967. Wages in industry averaged 113 rubles per month. At the present housing ration, therefore, rent for a small apartment for a family of four, excluding utilities, would absorb some 3.5 per cent of the average monthly earnings of the worker in industry. Payment for utilities, according to available fragmentary information, would probably consume another 3.5 per cent.

The extent of subsidization is not clearly indicated in official Soviet sources. On occasion, individual Soviet authors have estimated that the degree of subsidization is in the vicinity of 80 per cent.³⁰ If the 80 per cent figure is correct, the full rent for the 30 square meters of housing

²⁷ *Izvestia*, March 16, 1968, p. 2.

²⁸ *Ekonomicheskaya Gazeta*, No. 2, 1969, p. 36.

²⁹ *Molodoi Kommunist*, June 1968, p. 69.

³⁰ *Voprosy Ekonomika*, No. 10, 1964, p. 7.

Table 10
HOUSING SPACE IN THE U.S.S.R., 1957-1970
(end of year)

Year	Urban population [in millions]	Housing space [in million M ²]	Square meters per person	
			Gross [useful space]	Net [living space]
1957	95.6	723	7.56	5.29
1958	100.0	832	8.32	5.82
1959	103.8	896	8.63	6.04
1960	108.3	958	8.84	6.19
1964	121.7	1,182	9.72	6.80
1965	124.7	1,238	9.93	6.95
1966	128.0	1,290	10.08	7.06
1967	130.9	1,343	10.26	7.18
1970 ¹	145.0	1,556	10.73	7.51

SOURCE: Economic yearbooks of the U.S.S.R., respective years.

¹ As calculated by V. T. Robotov, *Finansirovanie i Kreditovanie Zhilishchnogo Stroitelstva*, 1967, pp. 10-11.

space cited in the above example would come to 20 rubles per month, net of charges for utilities; *i.e.*, 17.7 per cent of the worker's average monthly earnings.

The micro-district. According to current practice in the U.S.S.R., new housing projects are organized on the basis of a primary unit known as the micro-district. Typically, a micro-district consists of either (a) one enlarged city block measuring some 30 hectares (75 acres); or (b) a group of several blocks encompassing an area of 40-50 hectares. The population of a micro-district tends to range around 10-12,000 persons, or in the case of a high-rise apartment area up to 18,000 persons. Each district is planned to include, in addition to the basic dwelling units, an assortment of buildings and facilities designed to serve the needs of the residents and their children, such as stores, laundries, cleaning and repair shops, restaurants, schools and nurseries.

The houses in such a micro-district are generally of the "free plan" type of construction. The buildings are planned to be so situated as to provide the rooms with a maximum of daylight, to allow for the proper ventilation of the area, and for the best use of the natural slope of the land.

Some official criticisms of the home-building industry. Housing construction in the U.S.S.R., as would be expected, is at all times under the careful scrutiny of the central authorities. Most officials concerned with this critical area of public welfare have made it clear, over the years, that they are proud of the scale on which the industry operates but that they are not entirely satisfied with the degree of efficiency with which the affairs of the industry are managed.

The leaders of the industry are most frequently upbraided for failing to maintain an even flow of materials, equipment, technical documentation, transport facilities, and high-grade specialists to the building projects. They are criticized, furthermore, for permitting rush-work, excessive building costs, and poorly finished work. Disorders of this sort, according to the official press, are generally brought about by a failure to adhere to building schedules, with the result that many contracting organizations deliver between 40 and 50 per cent of their completed buildings during the fourth quarter of the year.³¹

In a special decree issued on February 16, 1968, to cope with this problem, the Soviet Government instructed the Ministry in charge to expand its facilities for training specialists in modern construction techniques and, at the same time, to improve both the working and housing conditions of its trained personnel in order to cut down on the wasteful turnover of specialists engaged in building and assembly operations.³²

Among some of the more serious defects of the early models of large-panel housing construction, which are still being cited in the complaints of the residents, a well-informed public commentator lists the following:

In some houses it is cold; corners freeze, as do sometimes the panels over the entire surface of the wall as well; gaps appear at the joints of the walls, through which the wind blows and dampness penetrates. Quite often, window tracks freeze; in some houses the ceilings are cracked and the floors sag.³³

Most of these defects the author ascribes to the lack of experience reflected in the early architectural designs. He characterizes them as "the result of the premature introduction of mass construction of standard houses not previously tested under operational conditions."

The approach The current scale of new residential construction in the Soviet Union is both large and impressive. Urban housing facilities are being augmented at a rate never before experienced in that country. The allocation of State funds to the program for providing the urban popula-

³¹ *Pravda*, January 12, 1968.

³² *Ibid.*, February 19, 1968.

³³ V. Svetlichny, in *Kommunist*, No. 6, 1965.

tion with adequate housing has grown to a substantial annual outlay, accounting for 14 per cent of all new capital invested in the national economy.

Real progress in this area of social betterment continues, however, to be slow. If we measure this progress by the margin by which housing space available per inhabitant has increased during the most recent 10-year period (1957-67), we find that the gain registered during this period amounts to no more than 36 per cent, namely from 5.29 to 7.18 square meters of living space, an improvement of 3.1 per cent a year.³⁴

The reason for this slow pace is not hard to find. The urban population of the Soviet Union has been growing recently at the rate of 3.5 million persons per year. This means that in order to cover the needs of the new contingent of urban residents alone, the building industry, according to one Soviet expert, must provide an annual addition of 45 million square meters of "useful" housing space.³⁵ Then, too, allowance has to be made for the attrition of old housing, which is now taking place at a rate equal to 0.8 per cent of the total housing stock. The figure for attrition has been estimated by the same authority at 8 million square meters of dwelling space.

In light of these figures, the Soviet expert concluded that by 1970 (the end of the 5-year plan) the U.S.S.R. would have at its disposal in the cities about 1,556 million square meters of useful housing space, as against an expected urban population of 145 million persons. Given these constraints, the inhabitants of the nation's urban settlements would be entitled to a "norm" of 10.7 square meters of useful housing space per person. Such an allocation would still be below the official Soviet sanitary "norm" for housing adopted in 1927, namely 12.85 square meters of useful space, or 9 square meters of living space.³⁶

The Library of Congress
Washington, D.C.

³⁴ *Ibid.*

³⁵ V. T. Robotov, *Financing and Crediting Housing Construction* (in Russian), Moscow, 1967, p. 10.

³⁶ *Ibid.*, p. 11.

World Conference on Labor Trends

AN INTERNATIONAL CONFERENCE on trends in industrial and labor relations will be held in Israel from January 9-14, 1972. The sponsors of the conference include the Israel Institute of Industrial and Labor Relations, the Israel Industrial Relations Research Association, the American Committee for the Conference (including Cornell University, the American Foundation on Automation and Employment, Inc., and the A.F.L.-C.I.O.), the European Committee for the Conference, and distinguished individuals from the academic world, industry, labor and government. In addition, the conference is to serve as an official regional meeting of the International Industrial Relations Association.

In order that we may inform as many interested persons as possible about the conference and give them the opportunity to submit a paper for presentation, we respectfully request that this notice of the conference be posted on your bulletin board.

Papers submitted for presentation should pertain to one of the following themes:

- New directions for collective bargaining
- Preventing and resolving industrial disputes
- Manpower problems and adjustments in industrial societies
- The changing labor force
- Innovations in industrial relations theories
- Teaching industrial relations

An abstract of the paper should reach the conference office as early as possible together with a brief biographical sketch. The full paper should reach the secretariat no later than August 31, 1971. It should be in English, not more than 3,500 words in length, and typewritten in double-space. Papers accepted by the Scientific Committee will be presented at the conference and will form the basis for discussion in the appropriate group session.

Communications about the conference and submission of papers should be directed to Eugene H. Becker at the conference office.

[FROM THE SECRETARIAT OF THE CONFERENCE: AMNON CHAPI, Director, Israel Institute for Industrial and Labor Relations, and ELI BEN NER, Executive Secretary, Israel Industrial Relations Research Association. Address correspondence to International Conference on Trends in Industrial and Labor Relations, 23, Rav Amiel Street, P. O. Box 21006, Tel-Aviv, Israel.]

REVIEWS

The Myths of 'The New South'

By OSCAR B. JOHANNSEN

The New South Creed: A Study in Southern Mythmaking. By Paul M.

Gaston. New York: Alfred A. Knopf, Inc., 1970, 246 pp., \$6.95.

AS A REACTION to the crushing defeat sustained by the South in the Civil War, a doctrine arose there in the latter part of the 19th Century known as the New South creed to contrast it with that which existed in antebellum days. Paul Gaston, an associate professor and director of graduate studies in history at the University of Virginia, in a scholarly but very readable book, exposes many of the myths which underlay that credo.

What was it? One of its enthusiasts claimed that "at its core were the ideas of economic regeneration, national reconciliation and adjustment of the race question." Its promoters advanced views approved by many people. For instance, they preached the gospel of hard work, and gloried in the abolition of slavery. They asserted that businessmen rather than politicians would rejuvenate the South, and pleaded for the adoption of new ideas to insure progress.

But, therein lay one of the principal myths. Progress was equated with a crass materialism, for they despised many of the amenities of life. They felt such were debilitating aspects of the Old South. In his evaluation of the New South spokesmen, Mark Twain summed up the true nature of the creed succinctly. "Brisk men, energetic of movement and speech; the dollar their god, how to get it their religion."

One of the more persistent myths was that industrialization would conjure up prosperity. The notion was initially proclaimed as one of the keys to revival. Repetition of the wonders which would ensue mesmerized many of its zealots into believing the day of resurrection had arrived. Henry Grady, the most articulate prophet, thundered "the day of the mighty harvest is here!" Naturally, there was some rebuilding, just sufficient to afford some grounds for declaring that El Dorado was at hand. But, overall, the facts were otherwise. Gaston states that in 1880 the South's per capita income was 49.7 per cent below the national

average. Two decades later, it was still below by almost the same percentage (49.8 per cent).

Possibly the most pernicious myth propagated was that the South, if left alone, would solve the racial issue with due regard for the rights of all. The myth's unmasking was not long in coming. Gaston notes that before the turn of the century "lynchings and other forms of violence directed at the Negro increased sharply: . . . the movement to disfranchise all Negroes had succeeded in two states, Mississippi and South Carolina, and was gaining momentum in the others."

Loud were the hosannas for the tremendous natural resources of the South. Ignored was the question whether or not property relationships inhibited their efficient utilization. As Gaston observed, "much more important are institutional and human factors." It turned out that whatever exploitation there was in the South was not so much of natural resources as it was of the black man and his poor white compeer.

Not all Southerners were bewitched by the New South rhetoric. George Washington Cable, a distinguished author, in analyzing the race problem in 1885, argued that at the heart of the issue of black and white rights was "whether the eternal principles of justice are violated."

In keying his criticism to justice, Cable pinpointed the central defect of the New South creed. Justice was given short shrift, when actually it was the *sine qua non* for the solution not only of the race problem, but of the South's other grave troubles. For example, it could hardly be said that the opportunities of the land were available to all on an equitable basis, regardless of race. Gaston notes that "in 1900 three out of every four (black men) who farmed were cropper or tenants whose livelihood was determined by white men." He shows quite clearly that belief in the credo so conditioned the thinking and actions of Southerners that justice had hard sledding.

The author writes interestingly and well. His study deserves a wide audience. In its perceptive analysis of the legacy bequeathed to the South's present generation—racism and a mythic view of reality—he affords some insight into the reasons for the actions today of Southerners toward attempts at reform. True to this more than true. As myths are not arguments in any regard, it also delineated many of those which confounded the nation, as a whole, then and to this very day.

New York

The Black Worker in New York

The Circle of Discrimination. By Herman D. Bloch. New York: New York University Press; London: University of London Press, 1969, 274 pp., index.

PROFESSOR BLOCH'S STUDY is defined by its subtitle: *An Economic and Social Study of the Black Man in New York*. The Black American, for 300 years after his introduction to New York, still encounters discrimination in areas like employment opportunities, housing, political participation and social and cultural organizations. Yet he persists in his efforts to achieve equal opportunity in employment through his own organizations or in conjunction with private and governmental organizations. This is fortunate, for equality of economic opportunity may well be the key to solution of the other problems. Professor Bloch's book brings the valuable resources of social history and social science analysis to the Black American's aid in his struggle to help the White American achieve liberation from the shackles of ignorance, fear and hatred which continue to impoverish the White American and his fellow citizens through discrimination.

W. L.

Memoir to a Very Great American

The American Century of John C. Lincoln. By Raymond Moley. New York: Duell, Sloane and Pearce; Toronto: General Publishing Co., 1962, 209 pp., index.

JOHN C. LINCOLN (1866-1959), electrical engineer and inventor of arc welding systems and other devices and systems, established the Lincoln Electric Company in Cleveland in 1895 with a capital of \$200. He also founded other flourishing concerns, and like Rockefeller, Ford and Firestone, to name just a few contemporaries, was a pioneer entrepreneur at the birth of the modern era of technology.

What distinguished John Lincoln, however, was that, encouraged by a devoted family, he dreamed of using study and research to achieve social and economic justice for all, in a regime constantly expanding the scope of individual liberty and promoting social responsibility. This dream was kindled in him by participation in the progressive movement in Ohio led by Tom Johnson and Newton Baker and other followers of Henry George.

John Lincoln used to drop by my office in Times Square regularly in the days in the 1930s and 40s when he was making his plans to achieve

his dream through foundations to be set up after his death. He would discuss his plans, eliciting my opinions and information with searching questions. Then we would drop by a restaurant for a snack or a meal—it was always a moderate-priced one, so that the tab, when it was my turn to pick it up, would be within my means—and I would walk him to the Prince George Hotel where he always stayed, a half mile away. No matter what the weather he would never take a cab.

The institutions that he set up are, for the most part, doing notable work, especially the Lincoln Foundation which has done so much to encourage scientific research in public finance. I like to think of them as projections of the remarkable personality of John Lincoln, whose wholly unaffected friendship I treasured.

This biography was begun by another man whose friendship I cherished, the Cleveland journalist, John Love. He too used to drop by my office on his frequent trips to New York, and I by his on my occasional visits to Cleveland. His untimely death obliged the distinguished journalist and political scientist, Raymond Moley, to undertake the task. He has done it well, capturing all facets of John Lincoln's personality. Mr. Moley has put all the friends of John Lincoln in his debt and it is a pleasant duty to record that it is a heavy one.

WILL LISSNER

New School for Social Research

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THE ASSESSMENT OF LAND VALUE

EDITED BY DANIEL M. HOLLAND

Proceedings of a Symposium Sponsored by the Committee on Taxation, Resources and Economic Development (TRED), 1969

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Conglomerate Mergers, Concentration and Competition

By JOHN RICHARD FELTON

THE GENERAL PUBLIC ordinarily gives little evidence of interest in the activities of the antitrust agencies of government. It is true that early in the 1960s considerable publicity attended the sentencing of several executives of electrical equipment manufacturing enterprises who had engaged in a price-fixing conspiracy. Public interest in this case was generated, however, not because of the novelty of price fixing but the novelty of jail sentences being meted out to corporate officials. Certainly the multitude of price-fixing conspiracies uncovered and successfully prosecuted since 1961 have created scarcely a ripple.

For the last several years public attention has once more been focussed upon antitrust law and the agencies which enforce it. The present object of public concern is the conglomerate enterprise and the merger process by which it has characteristically developed. Business publications regularly report on the most recent acquisitions of such firms and speculate on the likelihood of antitrust prosecution. This paper discusses the nature, extent, and causes of conglomerate mergers; the implications of such mergers for the concentration of economic power and the effectiveness of competition; and the problems of applying the antitrust laws to acquisitions of a conglomerate nature.

I

Varieties of External Growth

STUDENTS OF INDUSTRIAL ORGANIZATION have identified three kinds of mergers: horizontal, vertical, and conglomerate. Horizontal mergers are those between firms engaged in the production of identical, similar, or substitute products, *e.g.*, two meat packing plants or two automobile manufacturers. Vertical mergers are those between firms engaged in successive levels of the production process for a particular product or series of products, *e.g.*, aluminum refining and aluminum fabrication. Conglomerate mergers, then, are a kind of residual: all mergers which are neither horizontal nor vertical are conglomerate. Nevertheless, conglomerate mergers, themselves, can be functionally subdivided into three types: product extension, market extension, and pure conglomerate. A "product extension" merger occurs when a firm acquires another firm which is engaged in the production of goods or services of the same general class as the acquiring firm but where the products are not substitutable and do not compete with one another. The acquisition of the Chlorox Company, a bleach manufacturer, by Procter and Gamble, a manufacturer of numerous household cleaning agents, not including bleach, was a product extension merger.

A "market extension" merger occurs when a firm acquires another firm engaged in the production of the same goods or services but in a different geographic market. In other words, a product extension merger would be a horizontal merger had the acquiring and the acquired firm previously operated in the same market. A commercial bank or a cement company operating in one section of the country acquiring a commercial bank or a cement company, respectively, in another part of the United States, is a market extension merger.

A pure conglomerate merger, finally, occurs when a firm acquires another firm engaged in the production of functionally unrelated products. "Functionally unrelated," in this context, means that there are no technologically unifying characteristics in the conglomerate's activities—no similarity in raw materials, production processes, channels of distribution and so forth.

While, presumably, conglomerates might arise as a result of "internal" growth, *i.e.*, construction of new producing units by an existing firm, as a matter of practice, conglomerates are almost invariably the result of "external" growth, *i.e.*, merger. Thus conglomerates arise because they acquire the voting stock or the physical assets of firms engaged in a widely varied assortment of economic activities. As a consequence, *merger* is the characteristic way in which conglomerates are created and the process by which they grow.

II

Merger Trends

THREE MAJOR MERGER MOVEMENTS have developed in the United States: the first around the turn of the century, the second during the 1920s and the third from the middle 1950s to the present time. Unfortunately, there is no single statistical series which will permit us to compare merger activity year by year over the last 75 years, but we do have a continuous series from 1919 to date. The largest number of manufacturing and mining companies to be acquired during any one year from 1919 through 1966 was 1,245 in 1929. The second largest was 1,038 in 1928 and the third largest was 1,008 in 1965. Then, in 1967, some 1,496 manufactur-

Table 1

NUMBER OF MANUFACTURING AND MINING FIRMS ACQUIRED 1919-1969*

<i>Year</i>	<i>Acquisitions</i>	<i>Year</i>	<i>Acquisitions</i>
1919	438	1944	324
1920	760	1945	333
1921	487	1946	419
1922	309	1947	404
1923	311	1948	223
1924	368	1949	126
1925	554	1950	219
1926	856	1951	235
1927	870	1952	288
1928	1,038	1953	295
1929	1,245	1954	387
1930	799	1955	683
1931	464	1956	673
1932	203	1957	585
1933	120	1958	589
1934	101	1959	835
1935	130	1960	844
1936	126	1961	954
1937	124	1962	853
1938	110	1963	861
1939	87	1964	854
1940	140	1965	1,008
1941	111	1966	995
1942	118	1967	1,496
1943	213	1968	2,407
		1969	2,246

* Data limited to mergers and acquisitions reported by Moody's Investors Service, Inc., and Standard and Poor's Corporation.

SOURCES: Historical Statistics of the United States (Washington, D.C., 1960), p. 572, and Federal Trade Commission (FTC), *Current Trends in Merger Activity, 1969* (Washington, D.C., 1970), p. 9.

ing and mining concerns were acquired and, in 1968 and 1969, the total skyrocketed to 2,407 and 2,246, respectively.

The entire series from 1919 through 1969 is set forth in Table 1. It reveals that there were more mergers in 1968 than in the entire decade of the 1930s or of the 1940s, periods of vastly different levels of economic activity. The only year in our history that might have rivaled 1968 or 1969 in the intensity of merger activity (and the data are now too fragmentary to be sure) is 1899, the high point of the first merger movement.¹

It should be noted that the foregoing series covers only mining and manufacturing mergers reported in *Moody's* and *Standard and Poors*. A

Table 2

ACQUISITIONS OF MANUFACTURING AND MINING FIRMS
WITH ASSETS OF \$10 MILLION OR MORE, 1948-1969

Type of Merger	1948-1953		1954-1959		1959-1964		1964-1969	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Horizontal	18	31.0	78	24.8	42	12.0	79	10.1
Vertical	6	10.3	43	13.7	59	17.0	87	11.1
Conglomerate:								
Market extension	27	46.6	145	46.2	184	52.9	427	54.5
Product extension	4	6.9	20	6.4	24	6.9	87	2.0
Other	3	5.2	28	8.9	39	11.2	175	22.3

SOURCES: *Economic Concentration*, Hearings before the Senate Subcommittee on Antitrust and Monopoly, Part 2 (Washington, D.C., 1965), p. 516, and FTC *Current Trends in Merger Activity*, 1969, p. 19.

series of more recent origin, employing several additional sources, records not 2,246 acquisitions in 1969 but 4,550, as compared with 3,932 in 1968, 2,384 in 1967, and fewer than 2,000 per year for all previous years in the 1960s.²

For large acquisitions, *i.e.*, manufacturing and mining enterprises with assets of \$10 million or more, the Federal Trade Commission has also developed a series based on the type of acquisition: horizontal, vertical, and conglomerate. Table 2 reveals not only a great increase in the number of large acquisitions acquired but also a decline in the importance of conglomerate acquisitions and an increase in the importance of conglomerate mergers, especially the pure type. Thus, in the six years from 1948

¹ Nelson counted 1,208 mergers in 1899, but he concedes that his series "represents a merger movement among large firms, whereas the 1919-1939 Thorp series represents a merger movement among large and near-large firms." Ralph L. Nelson, *Merger Movements in American Industry, 1895-1936* (Princeton: Princeton University Press, 1959), p. 28.

² FTC, *Current Trends in Merger Activity*, 1969 (Washington, D.C., 1970), p. 8.

through 1953, only three "large" pure conglomerate mergers took place, while in the six years from 1964 through 1969 there were no fewer than 175 so classified.

III

Factors Promoting Conglomerate Mergers

HOW ARE MERGER MOVEMENTS, in general, and the recent wave of conglomerate mergers, in particular, to be explained? J. Fred Weston³ found a very high correlation between the merger rate and stock market prices during the period between World Wars I and II. Apparently a rising stock market facilitates and encourages the flotation of the new securities with which other firms are acquired. On the other hand, the failure of the stock market to generate any substantial upward movement the last couple of years does not seem to have been a serious deterrent to a greatly accelerated merger rate.⁴

While internal growth is always available as an alternative to external growth, the effects may be quite different. There are a number of private advantages from external growth which are not present when growth is internal:

1. An existing enterprise may possess a valuable asset in the form of good will. A firm whose products enjoy wide consumer acceptance has an advantage which is not likely to be overlooked by a potential acquiring firm. Procter and Gamble Company which once had considered constructing its own facilities for manufacturing bleach was not unmindful of the cost of diverting customers away from the Clorox Company whose name had become almost synonymous with household bleach.

2. Another private advantage of acquisition over new construction is that it does not increase the number of sellers in the market. This may be of considerable importance if a new entrant either to be efficient or to operate on a national scale would add substantially to industry output and depress prices as a consequence.

3. Still another advantage of merger over building new facilities is that it permits a much more immediate increase in output. On the other hand, as Irwin Stelzer has pointed out, the negotiation of a merger and

³ J. Fred Weston, *The Role of Mergers in the Growth of Large Firms* (Berkeley and Los Angeles: University of California Press, 1953), pp. 80-1.

⁴ The explanation may lie in the recent tendency for investors to purchase "growth" stocks as opposed to stocks with good records of earnings and dividends in the past. For a number of reasons, relating primarily to accounting practices, mergers can demonstrate striking increases in short-run earnings even though there are no underlying improvements in efficiency or long-run profit prospects. See *Economic Concentration*, Hearings, Part 8A, Staff Report of the Federal Trade Commission, *Economic Report on Corporate Mergers* (1969), pp. 120-34.

the integration of the acquired firm into the existing organization may itself be a time-consuming process.⁵

4. Finally, merger may confer tax advantages. These include the non-taxability of gains achieved through the exchange of stock, the tax savings associated with the exchange of convertible debentures for the common stock (or assets) of the acquired company, and the ability of the acquiring firm to "carry forward" any earlier losses of the acquired company.⁶

A recital on the private advantages of external over internal growth does not, in and of itself, of course, explain the increasing relative importance of the *conglomerate* merger. A major negative reason for its ascendancy is, perhaps, that strict enforcement of the antitrust laws with respect to mergers, having a potentially adverse effect upon competition, has encouraged large corporations to confine acquisitions to enterprises in which an unfavorable competitive impact would be the least likely. In short, conglomerate mergers may well be the only kind which large corporations can undertake with any reasonable prospect of avoiding antitrust prosecution.

On the positive side, diversification of a firm's activities may well reduce the risks associated with specialization.⁷ Very few industries, if any, are immune from changes in technology and in consumer tastes which can undermine the basis of any current success. Also, diversification increases the likelihood that a firm will find some useful application for the results of its research and development efforts. Since the output of a Research and Development program must, to a considerable extent, be uncertain and unpredictable, the greater the scope of a firm's activities, the brighter the prospect that a new process or product can be successfully exploited.

IV

Conglomerate Mergers and Over-all Economic Concentration

NOT ONLY DOES MERGER reduce the total number of independent enterprises but also, insofar as it involves the very large corporations, it increases what we may call "over-all" concentration, *i.e.*, the tendency for

⁵ *Economic Concentration*, Hearings before the Senate Subcommittee on Antitrust and Monopoly, Part 1 (Washington, D.C., 1961), p. 101.

⁶ *Economic Concentration*, Part 1, pp. 101-102.

⁷ Scherer has pointed out that, if two firms each with equal mean profit expectations and a standard deviation of 40 per cent in such expectations merge, the standard deviation of the combination's profits, assuming a purely random relationship between the profits of the merging firms, will be reduced to approximately 28 per cent. F. M. Scherer, *Industrial Market Structure and Economic Performance* (Chicago: Rand McNally, 1970), p. 101. Furthermore, Arnould measured the profit stability of a random sample of 33 per cent of 177 firms engaged primarily or secondarily in food processing and found the variance in profit rates was significantly smaller for the diversified firms. Richard J. Arnould, "Statement," *Economic Concentration*, Hearings, Part 8 (1970), p. 4691.

a relatively small number of the largest corporations to account for an increasing proportion of all corporate assets, employment, sales, or value added. The first comprehensive study of this phenomenon was undertaken by Berle and Means, who found the 200 largest non-financial corporations to be growing several times as rapidly as all other non-financial corporations during the 1920s.⁸ This accelerated growth rate of the very largest corporations was rather obviously fostered by the very extensive merger movement which occurred during this period. The close association of merger activity and over-all concentration is revealed by the fact that, of the 3.5 percentage points' increase, between 1925 and 1929, in the share of all corporate manufacturing assets controlled by the 100

Table 3
SHARE OF CORPORATE MANUFACTURING ASSETS AND VALUE
ADDED BY MANUFACTURE ACCOUNTED FOR BY THE 200
LARGEST MANUFACTURING FIRMS FOR SELECTED YEARS, 1947-1969

Year	Share Accounted for by 200 Largest Mfg. Firms	
	Corporate Manufacturing Assets	Value Added by Manufacture
1947	47.2	30
1954	52.1	37
1958	56.6	38
1963	56.3	41
1966	56.7	42
1968	60.9	N.A.

N.A.—Not available

SOURCE: *Economic Concentration*, Hearings, Part 8A (1969), p. 176.

largest manufacturing corporations, mergers accounted for 3.2 percentage points, or more than 90 per cent, of the increase in concentration.⁹ While the per cent of all industrial assets controlled by the 100 largest waxed and waned from one period to another, by far the greatest spurt between 1909 and 1958 occurred during the 1920s.

The effect of the current merger movement on over-all concentration can be inferred from the marked increase in the share of corporate manufacturing assets and value added by manufacturing accounted for by the 200 largest manufacturing companies for various years between 1947 and 1968, as set forth in Table 3. Since there are nearly 200,000 manufactur-

⁸ A. A. Berle and G. C. Means, *The Modern Corporation and Private Property* (rev. ed.: New York: Harcourt Brace, 1968), p. 36.

⁹ *Economic Concentration*, Hearings, Part 8A (1969), FTC, *Report on Corporate Mergers*, p. 181.

ing corporations in the United States, we can note that more than 60 per cent of all corporately-owned manufacturing assets are controlled by about 1/10 of 1 per cent of all manufacturing corporations.

While the *private advantages* of the conglomerate mergers may explain the movement, they do not *justify* it. If such mergers increased economic efficiency by permitting the production of the same output with fewer resources, a social, as well as private, rationale for conglomerate mergers could be developed. The absence of significant functional relationships in conglomerate mergers, however, would appear to militate against such an effort. President Johnson's Task Force on Antitrust Policy says flatly: "it is clear that many conglomerate mergers are not explainable in terms of obvious efficiencies in integrating the production or marketing facilities of the firms involved."¹⁰

V

Conglomerate Mergers and the Concentration of Economic Power

AN INABILITY TO DEVELOP a convincing social rationale for conglomerate mergers is not tantamount to a condemnation of them. Some potentially adverse consequences must first be demonstrated. The two most widely alleged evils of conglomerate mergers are that, first, they promote a dangerous concentration of economic power and, second, they diminish the effectiveness of competition. Let us consider each charge.

One of the students of industrial organization who has been most concerned with the problem of the concentration of economic power is Carl Kaysen. He has commented:

The large national market firm has available to it the promise of locating in a particular area or expanding its operation there, the threat of moving or contracting its operations as potent bargaining points in its dealings with local and even state political leaders. The branch manager of the company whose plant is the largest employer in a town or the vice-president of the firm proposing to build a plant which will become the largest employer in a small state treats with local government not as a citizen but as a quasi-sovereign power. Taxes, zoning laws, roads, and the like become matters of negotiation as much as matters of legislation.¹¹

As the number of producing units in the economy declines and decision-making authority in the private sector becomes progressively more centralized, the diffusion of economic power upon which the preservation of a pluralistic society may well depend is threatened with a dangerous

¹⁰ *Task Force Report on Antitrust Policy*, p. III-3.

¹¹ Carl Kaysen, "The Corporation: How Much Power? What Scope?" in Edward S. Mason, ed., *The Corporation in Modern Society* (Cambridge: Harvard University Press, 1961), p. 100.

erosion. As Reid has maintained, combinations of existing firms create "additional hierarchical tiers which, in most cases, further separate many individuals from the power elite and diminish personal control over their own destinies."¹²

While merger is only one of several factors contributing to the growth of large corporations, when, as in 1968, the mining and manufacturing assets acquired by merger were equal to approximately 45 per cent of the new investment in mining and manufacturing, the role of mergers in exacerbating the problem of over-all concentration of economic power is clear and unmistakable.¹³

VI

Conglomerate Mergers and Competition

NOT ONLY MAY PARTICIPATION in highly concentrated markets constitute a source of economic power for a conglomerate, as Kaysen has observed, but also the merger process may, itself, induce restraints on competition. We can best analyze the effect of such mergers on competition by recalling that conglomerate mergers are of three varieties: market extension, product extension, and pure. Samuel M. Loescher has advanced several reasons for believing that market extension mergers will have adverse effects on competition, including the elimination of potential competition between the acquiring and acquired firms in their present markets, as well as third markets, and the elimination of actual competition between the combining firms for inputs wherever the market area for inputs is larger than the market for the products of the merger.¹⁴

What, next, are the threats to competition posed by product extension mergers? In the first place, so long as a large firm, engaged in the production of a similar class of products, is a potential entrant through the construction of new facilities, it exercises an influence over the price and product policies of the existing firms. Specifically, its presence would tend to make the industry behave more competitively *even though it never, in fact, effected entry*. Secondly, the acquisition of a leading firm in the industry of the acquired company may lessen competition further by conferring artificial advantages upon such acquired firm. Both

¹² Samuel R. Reid, "Conglomerate Growth: Consistency with Economic Theory of Growth," in Leon Garoian, ed., *Economics of Conglomerate Growth* (Corvallis, Oregon: Department of Agricultural Economics, Oregon State University, Nov., 1969), p. 53.

¹³ Acquired assets in mining and manufacturing never amounted to as much as 17½ per cent of new investments from 1948 through 1966. In 1967, 1968, and 1969, however, acquired assets were 30 per cent, or more of new investment each year. FTC, *Current Trends in Merger Activity*, 1969, p. 18.

¹⁴ Samuel M. Loescher, "Statement," *Economic Concentration*, Hearings, Part 2 (1965), p. 831.

of these circumstances were present in the Procter and Gamble-Chlorox merger. Procter and Gamble not only was a potential entrant into the bleach industry but also its acquisition of Chlorox permitted Chlorox, as a P and G subsidiary, to purchase substantially more television time for the same money outlay because of the quantity discount advertising rates employed by television networks.¹⁵

Probably the most extensive analysis of the anti-competitive potentialities of the pure conglomerate merger has been made by Corwin D. Edwards. He has argued that some of the advantages enjoyed by the large firm arise from the *total size* of the enterprise, whether it operates in one market or in many. On the other hand, the large conglomerate firm enjoys advantages merely from the dispersion of its resources. These advantages, moreover, confer power over undiversified rivals which is inimical to effective competition. Edwards identifies these advantages as "(a) subsidization; (b) reciprocity; (c) full-line selling; and (d) the forbearance that prevails among large conglomerates."¹⁶

Without analyzing these alleged advantages of dispersion in detail, it might be noted that subsidization and full-line selling not only do not presuppose a conglomerate firm, but also are probably more likely to be associated with a multi-product firm selling related products. In the absence of predatory intent, subsidization may merely reflect product complementarity—the fact that the reduction of the price of product A may promote a sufficient increase in the sales of product B to enhance net profits. Full-line selling, on the other hand, if it does, in fact, threaten "to lessen competition substantially," is already actionable under Section 3 of the Clayton Act whatever the character of the firm engaging in the practice.

As for reciprocity, it would appear to represent a particular manifestation of existing power rather than additional power created by the merger process. If a conglomerate firm possesses monopsony power in the market for input A, it may exert that power so as to influence its customers to purchase output B from one of its divisions. Alternatively, it might have utilized its power to reduce the price of input A. The crux of the problem is the monopsony power, not the manner of its exercise.

Finally, in a market characterized by small numbers, mutual forbearance may be characteristic of even a single-product firm. Conjectural interdependence has been fundamental to the theory of oligopoly for almost forty years, and the number of firms in the various markets in

¹⁵ FTC v. Procter and Gamble Co., 386 U.S. 568, 573-4 (1967).

¹⁶ Corwin D. Edwards, "Statement," *Economic Concentration*, Hearings, Part 1, (1964), p. 43.

which the conglomerate operates, rather than the fact of multi-market, diverse-product operation, would appear to be the most relevant variable affecting "forbearance."

Conglomerate mergers would seem more likely to exert an anti-competitive effect when the acquired firm already occupied a major position in its market and became the beneficiary of certain pecuniary advantages, such as the superior reputation of the acquiring firm. On the other hand, a pro-competitive effect is possible if the acquired firm is not among the leaders.¹⁷

It may well be that Edwards and others¹⁸ have overstated the case and exaggerated the potentially adverse effects upon competition of the pure conglomerate merger. Students of antitrust policy are by no means unanimous in their appraisal of the movement. Bork has maintained that a "conglomerate acquisition is not a way of creating conglomerate power." and that "the acquiring firm's choice of one firm in the industry rather than another as a merger partner must be dictated by considerations of efficiency potential."¹⁹ Weston has argued that a good deal of "merger activity has been associated with the increased technological dynamism of the U. S. economy"²⁰ and that mergers which reduce income variance and institute programs of financial planning and control can "make some significant contributions to the economy."²¹ As a final example, Stigler has declared that he "must confess that the exact mechanics by which the total power possessed by the [conglomerate] firm gets to be larger than the sum of its parts (in individual markets) escapes me."²²

It would appear that the potentially ill effects of conglomerate mergers are at least as plausible as the benefits which Bork and Weston maintain that such mergers are conferring upon the economy. Furthermore, where diversification can accomplish increased economic efficiency, in-

¹⁷ Shepherd, *op. cit.*, pp. 44-5. If merger strengthens what Shepherd calls "second echelon" firms, there is empirical evidence to support the inference of improved economic performance. Richard A. Miller, "Marginal Concentration Ratios and Industrial Profit Rates," *Southern Economic Journal* (Oct., 1967), p. 264, found a negative correlation, other things being equal, between the share of the market accounted for by the 5th through the 8th firm and the industry average profit rate.

¹⁸ In addition to the works already cited, see especially John M. Blair, "An Overall View of Conglomerate Concentration," in Garoian, *op. cit.*, pp. 1-7, and Willard F. Mueller, "Conglomerate Mergers: A Crisis in Public Policy," *Nebraska Journal of Economics and Business* (Autumn, 1970), pp. 18-29.

¹⁹ Robert H. Bork, "Separate Statement of Robert H. Bork," *Task Force on Anti-trust Policy*, pp. 3-A and 4-A.

²⁰ J. Fred Weston, "Statement," *Economic Concentration*, Hearings, Part 1 (1964), p. 143.

²¹ J. Fred Weston, "Comments on Professor Shepherd's 'Conglomerate Mergers in Perspective,'" *Antitrust Law and Economics* (Fall, 1968), p. 40.

²² George J. Stigler, *The Organization of Industry* (Homewood, Ill.: Richard D. Irwin, 1968), p. 304.

ternal growth constitutes an alternative which would seem clearly preferable from the standpoint of the society. When an established firm in one industry effects entry into another industry by constructing new facilities, an increase in competition, rather than a reduction, would be the predicted outcome. As a consequence, a strict anti-conglomerate merger program would, hopefully: (1) retard, if it did not reverse, the trend toward increasing over-all concentration, (2) minimize the anti-competitive potentialities of conglomerates, and (3) channel diversification into new facilities construction with the prospect of increasing competition through inter-industry transference. These would appear to be more sufficient grounds to justify such a policy.

VII

Conglomerate Mergers and the Law

LET US TURN NOW to a consideration of the antitrust laws as applicable to mergers, in general, and conglomerate mergers, in particular. The Sherman Antitrust Act of 1890 contained general prohibitions against restraints of trade and attempts to monopolize but no specific injunctions against mergers or any other devices which might conceivably be employed to restrain trade or attempt its monopolization.

In the very first case to be decided under the Sherman Act, a federal district court cast grave doubt as to the applicability of the Act to mergers of any kind, horizontal, vertical or conglomerate. In the words of Judge Jackson: "It is very certain that Congress could not and did not, by this enactment, attempt to prescribe limits to the acquisition . . . by a corporation, of property . . . or declare that, when the accumulation or control of property by legitimate means and lawful methods reached such a magnitude . . . as enabled the owner . . . to control the traffic therein . . . a criminal offense was committed by such owner. . ."²³

The implication was clear: any attempt on the part of Congress to limit the growth of firms through prohibitions of stock and asset acquisitions was an unconstitutional infringement of property rights under the "due process of law" clause of the Fifth Amendment.

Three years later in *U.S. v. E. C. Knight Co.*, the Supreme Court reiterated Judge Jackson's doctrine. Said Justice Fuller for the court majority: "Congress did not attempt in the Sherman Act to limit and restrict the rights of corporations . . . in the acquisition, control, or disposition of property."²⁴

²³ *In Re Greene*, 52 Fed. Rep. 104, 115 (1892).

²⁴ *U.S. v. E. C. Knight*, 156 U.S. 1, 16 (1895).

Despite this pronouncement, however, the Supreme Court, by a five to four decision in 1914, upheld a lower court decree dissolving the Northern Securities Company,²⁵ a corporation which had been chartered to hold the stocks of the Chicago, Burlington and Quincy, the Northern Pacific, and the Great Northern railway companies. Furthermore, in 1911, the Supreme Court also upheld dissolution decrees against two of the largest industrial enterprises of their day, Standard Oil Company of New Jersey²⁶ and the American Tobacco Company.²⁷ Merger, apparently, was not regarded by the court as constituting one of the "normal methods of industrial development," but, on the other hand, affirmative illegality was not established by this fact alone.²⁸ Merger, even where it culminated in an industry-dominating combination merely created a "*prima facie* presumption of intent to restrain trade, to monopolize and to bring about monopolization. . . ."²⁹

The only Sherman Act case which might be said to involve a conglomerate merger was *U.S. v. Winslow*, in 1913.³⁰ The United Shoe Machinery Company had been created in 1899 by a merger of three shoe machinery companies which were engaged in the production of different, non-overlapping kinds of shoe machinery. Thus, it was what would now be termed a "product extension" conglomerate. Justice Oliver Wendell Holmes, who spoke for a unanimous court, could see in a combination of "three non-competing groups" no violation of the Sherman Act. As Holmes phrased it, since "they did not compete with one another, it is hard to see why the collective business should be any worse than its component parts."³¹

The inability of the Sherman Act to eliminate practices which might predictably have an anti-competitive effect led Congress, in 1914, to pass the Clayton Antitrust Act. This Act, among other things, contained a specific prohibition against intercorporate stockholding on the part of competing corporations. In the words of Section 7, "no corporation engaged in commerce shall acquire . . . the whole or any part of the stock . . . of another corporation engaged also in commerce, where the effect of such acquisition may be substantially to lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition, or to restrain such commerce in any

²⁵ Northern Securities Company v. U.S., 193 U.S. 197 (1904).

²⁶ Standard Oil Company of New Jersey v. U.S., 221 U.S. 1 (1911).

²⁷ U.S. v. American Tobacco Company, 221 U.S. 106 (1911).

²⁸ 221 U.S. 1, 75.

²⁹ *Loc. cit.*

³⁰ U.S. v. Winslow, 227 U.S. 202 (1913).

³¹ *Ibid.*, p. 205.

section or community, or tend to create a monopoly of any line of commerce."³²

A fatal flaw in this provision, as the antitrust authorities were to discover, was that there was no limitation whatsoever on merger through *asset* acquisition. Furthermore, asset acquisition mergers were immune from successful prosecution even though stock ownership had been an intermediate stage and even though the stock had been illegally held.³³

It was not until 1950 that Congress could be prevailed upon to rectify this defect in Section 7. Then it passed the Celler-Kefauver Antimerger Act which prohibited a corporation from acquiring either the stock or the assets of another corporation where "the effect of such acquisition, of such stock or assets . . . may be substantially to lessen competition, or to tend to create a monopoly." Recent cases suggest that Section 7 as amended and currently interpreted can be employed to invalidate horizontal mergers, as in *United States v. Bethlehem Steel Corp.*;³⁴ vertical mergers, as in *Brown Shoe Company v. United States*;³⁵ market extension mergers, as in *In the Matter of National Tea Co.*,³⁶ and product extension mergers, as in *FTC v. Procter and Gamble Co.*³⁷

In all these cases, some *potentially* adverse effect upon competition can always be shown. The real test of the applicability of Section 7 to conglomerate will come when a "pure" conglomerate merger is challenged. The most likely weapon against such mergers will be the charge of possible reciprocal dealing. Whenever A, who buys from B, is also engaged in the production and sale of goods which B buys, the opportunity for reciprocity arises. Furthermore, the larger and more diversified the conglomerate the greater the probability that the conditions for reciprocity will be fulfilled. Thus, the Department of Justice in its *Merger Guidelines* of May 30, 1968, considered that "a significant danger of reciprocal buying is present whenever approximately 15 per cent or more of the total purchases in a market in which the acquired firm sells are accounted for by firms which also make substantial sales in markets where the acquiring firm is both a substantial buyer and a more substantial buyer than all or most of the competitors of the selling firm."³⁸ This means that if 15 per cent or more of firm X's sales are

³² Act of October 3, 1914 (38 Stat. 730), Section 7.

³³ See *Thatcher Manufacturing Co. v. FTC and Swift and Co. v. FTC* 272 U.S. 354 (1926) and *Arrow-Hart and Hegemen Electric Co. v. FTC*, 291 U.S. 587 (1934).

³⁴ 168 F. Supp. 576 (S.D.N.Y. 1958).

³⁵ 370 U.S. 294 (1962).

³⁶ FTC Dkt. 7453 (1966).

³⁷ 386 U.S. 568 (1967).

³⁸ U.S. Department of Justice, *Merger Guidelines* (Washington, D.C., 1968), p. 24.

made to firms P, Q, and R and that firm A buys more from P, Q, and R than do A's principal competitors, B and C, then the acquisition of firm X by firm A creates "a significant danger of reciprocal buying."

If the conditions for reciprocity are not present, antitrust authorities might raise the possibility of internal subsidization and mutual forbearance, but these would appear to be more vague, less demonstrable possibilities. While *certainty* of an anti-competitive effect is not a requirement for successful prosecution under Section 7, the mere *possibility* of such an effect is clearly inadequate to sustain such a charge. There must be the *probability* that there will be a substantial lessening of competition or tendency to create a monopoly.³⁹ Thus, in the recent International Telephone and Telegraph Corporation case, a U. S. District Court dismissed the government's suit on the ground that the alleged "marketing and promotional advantages" accruing to the acquired Grinnell Corporation were mere "possibilities," not "probabilities."⁴⁰

More importantly, if the objection to conglomerate mergers arises fundamentally from opposition to further increases in the concentration of economic power, there is some question as to the propriety of attacking such mergers under a law which is directed toward eliminating potential restrictions on competition. Thus as the *Task Force Report on Antitrust Policy* points out:

Objections to conglomerate mergers based on specific anticompetitive effects may be pressed beyond the point where they are well founded, perhaps because of quite different objections, such as fear of the growth of individual large firms or of concentration of assets in very large firms, which are not explicitly recognized in the merger prohibition. The existence of these different objections may also lead to other distortions; for example, market definitions may be distorted to treat a conglomerate merger as horizontal and therefore subject to a more easily established prohibition. Such distortions would result in uncertainties and unfairness to those affected.⁴¹

With these considerations in mind, the Task Force recommended a supplement to existing Section 7 of the Clayton Act which would prohibit "large firms," *i.e.*, firms with assets in excess of \$250 million or sales in excess of \$500 million per year from merging with "leading firms," *i.e.*, firms with a share of more than 10 per cent of any market in which they operate.⁴² Such a statute would tend, perhaps, to place a limit on

³⁹ *Brown Shoe Co. v. U.S.*, 370 U.S. 294 (1962).

⁴⁰ *U.S. v. International Telephone and Telegraph Corp.*, USDC Conn., decided Dec. 31, 1970, reported in *The United States Law Week* (Jan. 12, 1971), p. 2366.

⁴¹ *Task Force Report on Antitrust Policy*, p. III-8

⁴² *Ibid.*, pp. B-1ff.

growth by acquisition, though it would not prohibit a large firm from acquiring non-leading firms.

VIII

Conclusion

AT THIS POINT in time, it must be confessed that we have no completely satisfactory theory to explain the conglomerate merger. Nevertheless, several hypotheses have been advanced which merit further investigation and testing.

Manne has suggested that, in an economy characterized by markets of small numbers and by separation of ownership and control in the large corporation, the corporate take-over may yield the advantages of "a lessening of wasteful bankruptcy proceedings, more efficient management of corporations, the protection afforded non-controlling investors, increased mobility of capital, and generally a more efficient allocation of resources."⁴³ Since a firm would, presumably, be more likely to be aware of and capable of rectifying managerial inefficiencies in other firms engaged in the production of similar, rather than dissimilar, products, Manne's hypothesis would seem to be more relevant to horizontal than conglomerate mergers.⁴⁴ Under any circumstances, competition in the market for corporate control would appear to be clearly inferior to competition in the product market, Manne to the contrary notwithstanding.⁴⁵ Even though the new management enhances the efficiency of operation, this fact alone will not induce the management to share such efficiency gains with customers.

Dennis C. Mueller has advanced the theory that firms are growth maximizers rather than profit maximizers.⁴⁶ The separation of ownership and control and evidence that the compensation of management is more closely correlated with the size of the firm than the profit rate lend credibility to such a theory. Moreover, it constitutes a plausible rationale for conglomerate mergers, in particular, since the absence of function

⁴³ Henry G. Manne, "Mergers and the Market for Corporate Control," *Journal of Political Economy* (April, 1965), p. 119.

⁴⁴ The empirical studies seem to show that, if firms employing merger as the primary techniques of growth achieve some "synergy" in the process, it is not reflected in differential profitability. The almost universal conclusion is that mergers, regardless of type, do not increase the earnings of the merged firms relative to what they would have earned if they had remained nonmerging firms. See, for example, the testimony of Richard J. Arnould, Donald P. Eslick, Thomas F. Hogarty, Eamon M. Kelly, Samuel R. Reid, and J. Fred Weston in *Economic Concentration, Hearings, Part 8* (1970), pp. 4605, 4537, 4649, 4692, 4704, and 4739.

⁴⁵ Manne, *op. cit.*, p. 119.

⁴⁶ Dennis C. Mueller, "A Theory of Conglomerate Mergers," *Quarterly Journal of Economics* (November, 1969), p. 627.

relationships makes less likely synergistic or market control motivations for such combinations.

Gort has propounded an economic disturbance theory of merger whereby wide variations in earnings expectations may well lead a potential acquiring firm to value the assets of a potential acquired firm more highly than do the present owners:

If the mean of the entire distribution of valuations shifts as a result of [economic] disturbance roughly proportional to that of current owners or managers, the increased dispersion in valuations raises the likelihood that some prospective buyers will place a higher value on the assets of a potential acquisition than the valuation of the group that currently controls the firm.

There is a wide variety of economic shocks that alter the structure of expectations, but the most common are rapid changes in technology and movements of security prices.⁴⁷

Employing a multiple-regression model with seven explanatory variables, Gort found that the economic-disturbance or valuation-discrepancies hypothesis provided a better explanation of mergers between January, 1951, and January, 1959, than did the alternative economies-of-scale and market-control hypotheses.⁴⁸ While Gort's hypothesis is an ingenious one, it should be noted that the variables employed are, by and large, only proxies for the variables identified in the hypothesis; that the period chosen for study antedates the bulk of the current merger movement; and that the theory does not distinguish between conglomerate and other mergers.

It may well be that all uni-causal theories of conglomerate mergers will prove inadequate. Hopefully, however, additional empirical research will enable us to differentiate between the more promising and less promising explanations of the conglomerate merger movement. In the meantime, it would seem appropriate to amend Section 7 of the Clayton Act to impose limitations on the ability of large corporations to acquire enterprises which are leading, although not necessarily dominant, firms in one or more of the markets in which they operate. As the *FTC Staff Report* has commented:

A strict policy [toward conglomerate mergers] would, at most, merely require that some firms grow by internal means rather than by merger. Moreover, if evidence is ultimately produced that mergers discouraged by a vigorous enforcement policy would actually have fostered competition, a strict policy can be modified. A lenient policy, on the other hand, could

⁴⁷ Michael Gort, "An Economic Disturbance Theory of Mergers," *Quarterly Journal of Economics* (November, 1969), p. 627.

⁴⁸ *Ibid.*, pp. 631-5.

well result in an irreversible structuring of the American economy toward a dangerous centralization of economic resources and decision making.⁴⁹

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⁴⁹ *Economic Concentration*, Hearings, Part 8A (1969), pp. 11-2.

Gandhi and the Curse of Caste

By MOHAN LAL SHARMA

KUSUM NAIR in her *Blossoms in the Dust* has reported how, less than a decade after Mohandas K. Gandhi's death, untouchability was being practiced in Sewagram, of all places, even after the Harijans there had embraced Buddhism. More recently, the Report of the Committee on Untouchability and Economic and Educational Development of Scheduled Castes revealed that Harijans ("Men of God," a Gandhian epithet which sounds so ironical) were refused entry into a community center in the village of Samalkha, near Delhi, which, paradoxically enough, had been opened by none other than the Mahatma himself.

Unquestionably, caste and caste disabilities are still very much with Indians, as is grimly clear from the ghastly tragedy that was enacted in Kanchikacherla where a Harijan was burnt alive not too long ago. In a tradition-saturated land, people still like to cite passages from ancient scriptures on the caste system. But caste in India is acquiring new functions and, seemingly, new strength. Democratic processes are obviously not allowed free play by caste loyalties and factionalism. It is imperative that today's Indians carefully examine the words, written on the Mahatma, in a recently published commemorative volume by Gunnar Myrdal:

Everyone who studied Gandhi's teaching in some depth must have pondered over what his intellectual, moral and political reaction would have been if he had returned to his India after 20 years of Independence.

It is also obvious, nevertheless, that the only way to bring about the decline of caste seems to be its confrontation with modern social, economic and political institutions. And, indeed, there is ample evidence that a process of what has been called "decomposition" of caste is already strongly in operation. In this sense in terms of "re contextualizing reality" of the changing spectrum of India—one might say that Gandhi's light is no ordinary light and it has not failed.

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The Psycho-Social Economics of Human Ecology

By GEOFFREY W. ESTY

IF WE ACCEPT that human ecology pertains to the many effects of environmental systems upon the behavior and viability of man, we can truly observe that society appears to be sick and even capable of self destruction.

Can behavioral scientists, including the social psychiatrists and psychologists, contribute to the survival of man and perhaps even to his recovery? They can, provided that, in treating the body politic, they do not limit their interests to the signs and symptoms of society's ills, but seek to correct and prevent those economic problems which contribute basically to society's crises and threaten its very survival.

Unfortunately, the potentials of the human race for self-destruction appear to exceed its efforts, through expedient practices, to ameliorate social ills. In the United States, for example, such measures currently include law and order programs, new welfare and income schemes, urban renewal through slum clearance, and the building of new or so-called model cities. But little thought is given to fundamental structural reform, such as changing inherited tax systems. These devices coupled with huge military "defense" expenditures, require enormous funds from tax sources, adding to the national debt and price inflation, and raising even the specter of national bankruptcy.

I

The Manipulative Society

IN BROAD TERMS, this potential for self-destruction starts with the family and its child-rearing practices and attitudes.¹ In an affluent society such as that of the United States, the manipulation of the child for the ends of others is common to the enlarging middle and upper socio-economic groups. This manipulation begins early in infancy and extends through childhood and the often massive dehumanizing education of schools, colleges and universities. The child, in turn, learns to manipulate his par-

* Presented at the *Second International Congress on Social Psychiatry*, London, England, August, 1969.

¹ Esty, "The Manipulative Society," in "The Prevention of Psychosocial Disorders of Youth: A Challenge to Mental Health, Public Health and Education," *Journal of School Health*, Vol. 37, No. 1 (January, 1967), (a paper presented before the World Federation for Mental Health, Prague, Czechoslovakia, July 20, 1966).

ents, his teachers and professors in order to achieve the grades required for high school graduation, college entrance and college and university degrees. Under such conditions learning to think critically, through personal discovery and experience, gives way to conformity. Furthermore, during this protracted period, many young children and adolescents are under great pressure to achieve, whether by "grades," scholastic performance, participation in sports or through a multitude of managed extra-curricular activities, mostly motivated to provide satisfaction for adults.

If young people fail to meet the approval of adults, or if they have handicaps like bad rote memories, they frequently drop out or are pushed out of school or society, for society itself is geared to this process of manipulation in socialization, as well as in business and in politics. With this preparation, the young person enters the "thing-centered" society during or after a protracted adolescence, at the mercy of the business community and its exploiting arm—the advertiser.

Furthermore, these pressures in the family and community and at school tend to emphasize error and the deficiencies of nonconformity. For many, these disabilities contribute to feelings of chronic inadequacy and to the loss of personal dignity and worth. Such feelings among children and youth are conducive to escape through the development of various psychosocial patterns of behavior. A frustrated creative power can thus become a destructive power.

Through B. F. Skinner's experiments with animals, interest in behavioral psychology has once more become fashionable. It appears to support the theory of manipulation of the human environment as a means to accomplishment. Reinforced by Jerome Bruner's discovery (known for many years by pediatricians), that toddlers learn more rapidly at two years of age than at any period of their development, Omar Khayyam Moore, while demonstrating the "talking typewriter" to an avidly listening group of parents, assured them that toddlers of three should and could learn to read and write, and that they could excel over other children upon entering school. Quite apart from failing to appreciate experience as a basis for learning communication skills successfully, parents clearly found such ~~about time to be competitively advantageous and rewarding~~ To people who desired pleasure from baby crawling cars, "itty-bitty" basketball, "Pop Warner" football and "Little League" baseball, the concept was beautifully appealing. Despite the emphasis on rewards, participants still harbored feelings of fear of failure for their inability to satisfy their parents.

The very concept of manipulation denotes a lack of respect and con-

siderate regard for the unique individual. In these terms, manipulation is a violation of nature. To thrive, the self must be respected, though its overt behavior need not necessarily be condoned. The object of child rearing and the process of education is for the individual to become sensitive and aware of the uniqueness of each human being, and to learn to relate with others who are also unique in order to develop the individual's self-respect and self-actualizing potential.

Too often, however, there seems to be a tendency to use people as though they were natural resources—to be mined, controlled, manufactured and shaped. We are becoming aware that the exploitation of natural resources and land, without regard to conservation and proper use, upsets the balance of nature and man—a part of nature. Such abuses result not only in aridity, floods, and destruction of natural resources, but in pollution of the air, the land and the water. We are not fully aware, however, that exploitation and manipulation of human resources also bring about *social* pollution and human wasteage, which may threaten our very survival.^{1a}

II

A Generation in Search of a Future

YOUTH IS IN REBELLION. During the past few years student unrest has erupted into violence in many parts of the world, including, of course, the United States. Stirred by the senseless war in Vietnam, the military industrial complex, the credibility gap from Washington, the poverty and starvation over the world including the United States, the growing awareness of the injustice to black and other minority groups, youth has become disenchanted with the "establishment."

They have protested against parents and teachers who do not listen, the arbitrary and dogmatic approach of education, rote learning, the acquisition of irrelevant information in schools and colleges, and the lack of opportunity for them to participate in and take responsibility for the decision-making process. Influenced by the rise of the humanistic and existential psychologies, they abhor hypocrisy, pretense and deception, whether in the home, the community or the political administration. As a result, these young people have often acquired a new vision of social responsibility and justice.

Sparked initially perhaps by experience in the Peace Corps, youth has found meaning in human rights—particularly the right of all people to be respected as human beings—and the right of equal opportunity to the means of subsistence.

For youth, the "new morality" is love for one's fellow man, not for killing. The latter is obscene; sexuality is not.

^{1a} *Op. cit.*

Ronald Sampson summarizes the student's discovery of "the barren inheritance of the past," by saying:

The truth of the matter is that the new generation, from which the students are drawn, can see clearly enough that the world, directed by their elders, themselves burdened by an evil past legacy, is headed for disaster. They naturally feel an urgent need to understand the causes of what has gone wrong, and a very human and laudable desire to mitigate the terrible suffering which has ensued—particularly for people in Vietnam, Biafra, Algeria, Palestine, Latin America, South Africa, but also for the hosts of poor and deprived people in the Western industrial heartlands themselves. As the natural sciences offer them no means of understanding what are essentially human problems, as these disciplines are indeed directly implicated in the production of some of the worst evils from which escape is sought (atomic weapons, biological, chemical warfare), students increasingly seek entry into the frequently overcrowded lecture halls and libraries of the humanities and social sciences. What then must be their frustration and disillusion when all too frequently they are proffered, in the name of science, not ruthlessly honest analysis of existing social evils but a framework in which problems are defined in terms of the existing culture whose presuppositions are never called in question?²

Youth, then, waits to tackle social-economic problems fearlessly, and with a let-the-chips-fall-where-they-may attitude. We need their honesty, their idealism, their haste. Most of all we need their new-found value system based upon the worth of human beings. When these values are coupled with a respect for the knowledge and wisdom of the behavioral scientists, the new youth can assist in a break through in behalf of freedom, justice and the equal opportunity for all people to survive. Let us then also involve them with the most basic and almost forgotten "inheritance of the past"—the land.

III

The Last Frontier

SAMPSON'S APT PHRASE could well refer not only to the manipulation of man for monetary advantage but also to the exploitation and seizure of the abundant face of the earth, for the even greater advantage of the few over the many. Man, not concerned until recently with conservation and with the balance of nature, has plundered, wasted, destroyed and squandered the precious land, without thought to the man, animal and bird life still so mindful of the past, man is now about to embark on plundering the other two-thirds of the world—the deep seas. He has yet to learn to work—

² Ronald Sampson, "What Is a University?" *The Nation*, May 5, 1969, quoted by *Current*, June, 1969, p. 30.

to use a carpenter's term—"with the *grain*" of nature as well as man! As man fails to respect the individual human being, so does he fail to respect the bounties of nature which make life on this planet possible.

The last frontier is upon us, for very few areas of the world are still available for the taking without payment to others for the permission to survive thereon or therefrom. With the specter of malnutrition, world hunger and even famine in the face of rapidly growing populations, the future, despite birth controls, promises to be cataclysmic unless more land can be freed for the production of food and for increased living space.

So entrenched in the history of civilization are our inherited land owning practices, that we have seldom seriously challenged their assumptions, nor have we probed adequately the effect of such practices upon the economy of nations. We must do so now.

The historic feudal systems of the past still persist, in kind, in many countries such as Peru. The enormous land areas usurped by the Spanish, Dutch and English rulers with lavish grants to court and colonial favorites and later by our own ruthless land-grabbing "robber barons," have been protested by only a few as an injustice to the landless and as ultimately injurious to the nation's economy.

IV

Agrarian Land Reform

AGRARIAN LAND REFORM has now received world-wide recognition in attempts to make arable lands more available to farmers and peasants. This growing interest and concern was witnessed at the World Land Reform Conference held in 1966 in Rome, Italy.³ The Conference, organized by the Food and Agriculture Organization (FAO) of the United Nations, was attended by over 300 delegates, experts and consultants from 77 countries.

In addition to the recognized benefits of agrarian reform by the opening up of new lands for farming and the establishment of cooperatives, there was repeated emphasis that "Land is life" and that "It is the [traditional] system which produces *inequality* and *injustice*." Nevertheless, with very few exceptions, land redistribution, as discussed at the Conference, did not consider the *human* incentives and motivational factors involved and required for success. Instead, rural land redistribution has been dependent upon the arbitrary decisions of governments. Further-

³ Some of these sections have been adapted and modified from an earlier paper presented at the 20th annual meeting of the World Federation for Mental Health, Lima, Peru, Nov. 1967; and incorporated in "The Psychoeconomics of Family Mental Health and Living Space," *Journal of School Health*, Vol. 38, No. 1 (January 1968).

more, little attention was directed to *urban* land reform. Here, taxation has been viewed exclusively as a fiscal matter, without reference to its psychological impact upon human behavior and motivation.

The Conference chairman closed the meeting by saying that if effective action was not taken soon to alleviate the "condition of existing and impending hunger and extreme social inequity within and between nations, we may witness a cataclysmic social disruption in many parts of the world during the coming years, and the very peace of the world may be threatened."

V

The Plight of Our Cities

CAN CITIES SURVIVE? In the face of the "social dynamite" foreseen by James B. Conant 8 years ago, can man survive life in the big cities, torn as they are by violence, rioting and crime? Can education in the ghettos offset the culture of the slum?

The process of city decay and social destruction is clear. Only the rich, the poor and the childless can afford to live in many of our large cities. Middle-income families have to join the sprawled suburbanites, drawing industry with them away from the city. At the same time, the deprived, the landless and the alienated crowd into the slums, prey to violent social and political doctrines. Taxing sources lag further and further behind skyrocketing services and welfare costs. Education suffers. A vicious cycle forms.

This process of implosion is reaching "the critical mass." Ever larger social explosions have occurred—initially during the hot summer, then sporadically at other seasons—and been joined during the past few years by violence in the universities and high schools. Endemic civil strife becomes epidemic and increasingly contagious. Civil guerrilla warfare appears. In 1967, Paul M. Ylvisaker, then New Jersey's Commissioner of Community Affairs, warned:

If we do not begin to respond to the guerrilla warfare which is emerging now in some of our cities, we may have as rough a military problem in [our] country as we have outside.⁴

The problem we have been discussing are human problems. "Our cities, which were once the centers of the world, are now becoming 'hell' turning into inhuman ones. . . . We can save cities only as we do people, by curative policies, and, even better, by preventive ones."⁵ Dr. Rene

⁴ Interview on WOR-TV program, "New Jersey Report," Sept. 3, 1967.

⁵ Dr. C. A. Doxiadis, "Of Inhuman and Human Cities," *New York Times*, March 11, 1967.

Dubois, a noted biologist, warned:

The total response of man to man is, I think, an absolutely essential part of human development. And if our cities fail to provide that . . . I think we'll bring about such a gross impoverishment of human development that our civilization will eventually die.⁶

VI

The Psycho-economics of Incentive Social and Tax Reforms

ECONOMICS IS FUNDAMENTALLY THE STUDY of human subsistence and survival. *Before a man can live nobly, he must first be able to live.* Human justice demands that every man be conceded a right to life. To deny this is to grant that others may, for their own convenience, deprive him of life or subsistence.⁷ Moreover, all men have *equal* rights to life, for to deny this is to grant that some have a greater right to life than others. . . . This implies that, in the last resort, those with a greater right may legitimately kill those with a lesser right. If all men have equal rights to life, they they have equal rights to that without which life cannot be sustained; that is to say, those elements provided by this planet which makes life possible—the land, all natural resources.

In order to act, man must have incentives to become motivated. Incentives, however, may lead either to socially desirable or to socially undesirable action. It becomes necessary, therefore, to promote such tax and social reforms as will bring about compliance in terms of safeguarding basic human justice and equality.

There are fundamentally three methods of achieving land reform. One way is to nationalize all land, rural and urban, through the power of the State to expropriate land without compensation. Under this system, there can be no private ownership, and consequently land has no market value. However, experience has shown that farmers working on collective and state farms are poorly motivated to meet their quotas of production except when permitted to farm their own parcels of land from which crops could be marketed competitively.

The second method of rural land reform is now commonly used in many countries. Their representatives discussed their different methods at great length at the World Conference on Land Reform. In most of these countries, the State acquires titles to land and natural resources through the right of eminent domain, and either nationalizes associated industry

⁶ Dr. Rene Dubois, interview, "Can Man Survive Life in Big Cities?" *U.S. News & World Report*, May 1, 1967, p. 64.

⁷ Several passages paraphrased and partially quoted from an article by A. J. Carter, "A New Approach," *Land & Liberty*, March 1967, pp. 26-27.

or distributes land to farmers or cooperatives. Generally, the State compensates the former title owners with high-interest-paying bonds, but is obliged accordingly to increase the general tax burden.

The third method, in contrast to the other two, levies a tax on a percentage of the site value or land value, reducing in turn taxation on improvements or production. This method leaves the free market in land untouched, and private titles intact. Even a full collection of site value would secure equal rights to land without interference with the economic advantages that go with private *possession* of land and natural resources. It does this by enabling the individual to enjoy this exclusive possession on condition that he compensates the other members of the community for relinquishing their theoretically equal claim to that site, by his payment to the community of the equivalent of the valuation placed upon it.

Under traditional tax systems, land or site values tend to be under-assessed and lightly taxed, while improvements to land such as buildings or farms are overassessed and heavily taxed. For example, a compassionate slum owner wishing to improve or rehabilitate his slum building, would be faced with increased taxes for so doing. Such taxation promotes resistance, non-compliance and circumvention, and a subsequent disrespect for the law. In other words, *constructive efforts to remedy injustice and to better human living conditions are penalized rather than encouraged by conventional tax practices*. Under such systems, central city slums and the degrading shanty towns surrounding great cities, have been unwittingly promoted. Population density and overcrowding, with their attendant social pathology and disruption, continue and are augmented.

The motivation of the land owner under conventional tax practices is to hold his sites or land vacant or inadequately used in order to maintain his tax privilege and advantage. In fact, slum sites, for example, are really subsidized by a city's taxpayers for the attractive investments of a few, including colleges and even churches, while waiting for a speculative killing as population pressures increase. It becomes evident, therefore, that under present tax systems, urban renewal and model city schemes, whether supported through federal, state or community taxation, or even if funded by private industry, contribute ultimately to higher and higher land prices and increased production costs.

Efforts to improve living conditions in shanty towns or central city slums without an equal effort to improve the conditions of the rural impoverished, only accelerates the movement of the rural poor into the cities, displacing the more affluent. Facing bankruptcy from these pressures, as well as social turmoil, and unable to afford essential educational facilities

and services, cities may not survive unless they soon adopt incentive taxation, characterized by a gradual increase of taxation on sites with a corresponding *untaxing* of improvements or production.

Cities and towns in Australia and New Zealand have used such incentive tax systems for many years, as have a few cities in the United States and Canada. In the last two decades, Taiwan has increased its per capita standard of living to the highest levels in the Far East by means of an agrarian reform based upon a progressive land value tax or its equivalent, and a lowering of charges against crop yield. This gave the necessary incentives to make improvements on the land with its resulting increased agricultural production.

Denmark, during the last century, after assessing all its land, both rural and urban, and reassessing every five years, rid itself of slums and strengthened its entire economy through a degree of taxation of "ground rent" and a partial exemption from taxation on buildings or other improvements to land. Denmark, in fact, was the first country to establish agrarian land reform *and* urban land reform in a single unified system of taxation.

Based upon world-wide experience, research and competent tax studies, what are some of the beneficial results that have accrued and can be expected from such constructive incentive tax systems? Many could be listed, but the following are examples:

1. The freeing of hitherto unavailable arable land for agriculture, soil conservation and increased food production.
2. The bettering of the living conditions of rural people.
3. The conservation of natural resources and the preservation of the natural ecology.
4. The building up of land reserves.
5. The improvement of property and the elimination of slums.
6. The preservation and rehabilitation of neighborhoods and the lessening of overcrowding and urban sprawl.
7. The opening up of more urban land for optimum site use.
8. The development of a sound and viable municipal economy.
9. Elimination of the need for violent revolutions and civil wars.
10. The lessening of human, family and social breakdown.

VII

A Sense of Urgency

ONE THING BECOMES crystal clear: In a world beset by strife, riots, hunger, famine and family and social disintegration, there is a predominating

sense of urgency to seek answers to the psycho-social economic problems of society, if society itself is to survive. As we have seen, survival problems are human problems. They are remediable and preventable, provided human drives and motivations are founded upon justice.

There are many other emergent psycho-social economic problems of society affecting human survival and behavior. Among these are the welfare and the aid programs whether local, national or international. In my opinion, the often repeated cliché "helping people to help themselves" is a semantic fallacy largely without relevancy to the psychology of human behavior. Aid or assistance should be based on a mutually respecting and helping relationship, if feelings of inadequacy and injury to self-esteem and dignity, whether personal or national, are not to be intensified.

Economists, elected officials and city planners, responsible for the making of policy and the passage of laws, are seldom mindful of the psychology of constructive human behavior. It is strongly urged, therefore, that social psychologists, social psychiatrists, behavioral scientists, cultural anthropologists and others familiar with the important roles that incentives and motivations play in human affairs, begin to involve themselves with the leadership of governments and with the concerned youth leadership as well, to counsel with them on the psycho-social economics of taxation, welfare and aid programs as they affect human dignity, health and survival.

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Life Sentences at Hard Labor

THE MAJORITY of the world's children have been condemned to life sentences at hard manual labor—even though they are innocent of any crimes! Why? Lack of educational opportunities locks them into lifelong involuntary servitude. Millions are victims of chronic debilitating diseases and malnutrition caused by poverty and ignorance. But it doesn't have to be that way! The United Nations Children's Fund is busy in the developing countries, helping governments improve and expand educational facilities, to make schooling and vocational training available to more and more children, bringing them new knowledge, new opportunities, new hope. The children in the low-income countries are eager to learn and willing to work hard to improve their lives. They can look forward to a brighter tomorrow, if we help UNICEF to help them, and if we export to them the knowledge of how to build a progressive, democratic social order, free of the shackles of monopoly capitalism and socialist Statism.

Migration and Population Change in the Irish Republic

By RAYMOND E. CRIST

Pertinent Historical Factors

IRELAND HAS BEEN the victim of invasions since time immemorial. The Romans did not conquer the island but Saint Patrick did. From the 5th to the 9th centuries it was a seat of religious learning, from which missionaries went to all parts of Western Europe. It was then that the hermits who lived on the islands of the lakes or of the western coast became renowned. Celebrated schools were founded, of which that of Armagh numbered more than 7,000 students, many of whom came from foreign lands. Irish clan chieftains fought among themselves for a thousand years, and only quit to fight against the Danes from the end of the 8th century to 1014. Then the Irish could and did go back to fighting each other again till the Normans came in 1170. But the battles got really bitter under Henry VIII—who took the title of King of Ireland in 1541—when religious fervor gave added zest to throat-slitting on both sides.

A century or so later the Puritan Cromwell came with his war without quarter, in which men, women, and children were slaughtered. His infamous Settlement in 1653 meant in effect that great landed estates were given his English followers, and thus was inaugurated the absentee landlord system that plagued the island for centuries.

Both the English and the Scots adopted the method of planting colonists. In this wise Ulster passed almost entirely into the hands of colonists who had come from Great Britain. About a sixth of the country, some of it very poor land, remained in the hands of the original inhabitants of the island. Many of the latter became simple renters, who worked the properties of the foreign absentee landlords. As late as 1903, 750 landlords owned more than half the island, and three alone had more than 100,000 acres.

Formerly in the face of a comparable situation I would simply have said that the lands and rights of the autochthonous Irish population were usurped by the British invaders, and let it go at that. But now a brilliant writer like Robert Ardrey writes a book on the Territorial Imperative, so

I guess I had better use the modern jargon and say that the English invaders impinged on the territoriality of the Irish. They did indeed, all along the line. By the Penal Laws enforced after the Treaty of Limerick (1695), religious persecution was pushed to absurd lengths: even Lord Chancellor Bowes declared that "The Law does not suppose any such person to exist as an Irish Roman Catholic!" Of course, one says, this kind of bigotry was rampant almost everywhere at that time. Yet in 1935—not 1635 or 1735, mind you—the Attorney General of North Ireland addressed a jury in a murder case in the following terms: "The motive of the crime is evident. The murdered man was a publican and a Roman Catholic, and therefore liable to assassination." A proud, vigorous people meets such challenges head on. For centuries the Irish never put their shillelaghs down until complete political independence from Great Britain was at long last achieved on April 18, 1949, with the creation of the Irish Republic.

Absentee Landlords, Famine, and Emigration

THE CONSEQUENCES FOR IRELAND of this dispossession have been enormous. Except in the district of Ulster, where landholding Anglo-Saxon farmers cultivated their own farms, the system of vast landed estates was disastrous, because the absentee landlords had little interest in agriculture. Conditions in the country became very bad. Agriculture was practiced on run-down soils which were never fertilized, by a steadily increasing and ignorant rural population, always at the mercy of a famine, of which the island had suffered many severe ones for more than a century. From the beginning of the 19th century there was a steady stream of emigration which was directed mainly to the United States. It increased a great deal after the Great Famine of 1846, when the potato crop failed from disease.¹ From 1846 to 1850, two million, four hundred thousand Irish emigrated. Between 1850 and 1900, 4,000,000 abandoned the island. In 60 years (1841–1901), Connaught lost 57 per cent of its population, Munster 55 per cent, and Leinster 41 per cent. Today there is in the United States an Irish population many times greater than that of Ireland. Those that survived the famine and the Atlantic crossing in the infamous "coffin ships" were tough indeed.

Nationalism and the Irish Language

IN THE COURSE OF TIME the imported and superimposed English language

¹ *The Great Hunger*, by Cecil Woodham-Smith, depicts the appalling conditions of the starving peasants, their women and children scattered "like a flock of famished crows over the fields devouring raw turnips."

became the *lingua franca* of most of the population, although Irish continues to be spoken as a mother tongue in the remote western counties and off-shore islands. Emigration over the past century was largely from the stricken western counties, where the heaviest concentration of Irish-speaking population lived. Hence by 1870 only about 20 per cent of the Irish were 'Irish speakers,' as the local phrase has it. The sacrifices of the Irish in their fight for national independence greatly enhanced their almost reverent attitude toward their language, and Irish was officially sponsored from 1922 on. The 1926 census showed that out of a population of some 3 million there were 543,000 Irish speakers, but these figures may be tinged with wishful thinking. The role of Irish in Ireland is entirely different from that played by dialects or regional languages elsewhere, for example, Catalan in Catalunya or Quechua in the South American Andes. In those areas practically everyone has Catalan or Quechua as his mother tongue, and first learns the official language of his country (*viz.* Spanish, in both cases) when he goes to school. Numerous other cases could be cited.

In the Republic of Ireland today stiff examinations are set, *in Irish*, for all those planning to teach. Villages where Irish is the mother tongue of everyone are inundated, especially during the summer, with students who come to perfect their Irish before taking their examinations. Simple crofters and fisherfolk thus make a better living as teachers of their mother tongue than they ever did on their inadequate holdings or in their fragile boats. Out of 13,622 teachers in 1949, only 8.2 per cent were without a certificate showing that they could teach Irish, and during the 1948-49 school year instruction was entirely in Irish in 534 out of 4,896 graded schools. At Galway College students may take all their examinations in Irish. Today it is thought that something like one-tenth of the population, or perhaps some 400,000 people, either have Irish as their mother tongue or can communicate with ease in that language.

Tourism

THE MOST RECENT INVASION of the island, a more or less peaceful one, is that of the American tourist, some of the 30 million descendants of Irish immigrants who are as anxious to visit 'ye auld sod' as the Moslem is to make his pilgrimage to Mecca.

The invasion of tourists is of gargantuan proportions. Scores of sight-seeing buses transport thousands of visitors to picturesque and historic sites. There is a network of excellent roads, both modest and luxury hotel accommodations are available, and prices are reasonable. Indeed

there are accommodations for every purse. Incidentally, when you see the sign "B and B" in front of a private home in the country, do not be deceived—they are not advertising 'Benedictine and Brandy,' but 'bed and breakfast'! There are tourist information offices in every town and even in many villages, staffed with lovely, exciting girls and robust, handsome young men, who graciously help travelers plan their trips.

Bleak Future for Agriculture

THE ISLAND is still predominantly agricultural. But farming yields little in return for very hard work. From interviews with farmers, who were invariably cheerful and hospitable, one gets the impression that work is not rewarding enough. Further, it was impossible to interest the young people enough in farm work to anchor them on the farm. Besides, there simply was not enough land to go around among the younger members of large families. The pig market at Killarney is picturesque to be sure, and it gives the farmers a chance to chat with each other on the street or in the beverage rooms, but the actual returns are very low indeed, considering the amount of care and effort expended in raising shoats to marketable size. Sheep herding and the cutting of peat, always called turf in Ireland, on the bleak, windy, treeless moors are occupations that do not attract the young, who long for the warmth and fellowship to be found in the neon-lighted streets or the dimly lighted pubs, or who yearn to go to America to seek their fortune.

Fishing, an Industry in Decline

FISHING WAS ONCE a significant occupation, especially along the west coast and on the off-shore islands. The documentary film, *Man of Aran*, vividly portrayed to millions of movie-goers the desperate struggle for existence of those on the Aran Islands. Fishing was also for long the main activity of the Blaskets, the most westerly point of Europe. But the Great Blasket, measuring four miles long by $\frac{3}{4}$ mile wide, was abandoned by the islanders in 1953. These hardy fisherfolk, who also farmed tiny holdings, were a purely Irish-speaking community, and still maintain their old traditions and customs in their new settlements on the Dingle Peninsula. Those who feel that suffering, privation, and unrelenting toil inspire to creative, artistic efforts should take note that two Great Blasket islanders have written classic works about life there: Tomas O'Crohan in *The Islander* described a vanishing mode of life in a primitive community, often stormbound for weeks, where he went hungry when the fish or crops failed, and lived well when a storm drove a wrecked

freighter up on the beach. In this delightful volume the author admirably achieves his purpose, which, in his own words, was "to set down the character of the people about me, for the likes of us will never be again." This purpose he fulfilled in simple, picturesque language. Maurice O'Sullivan in *Twenty Years A-Growing* tells the story of his childhood. His lyrical style springs largely from the fact that, as he tells us in the preface to the Irish original, he wrote the book "for the entertainment and laughter of the old women of the Blasket Island, who showed me great love and affection when I used to call on them during the long winter nights. And so, remembering their sorrow when I left them, I took up my pen and wrote this book in order to send by voice into their ears again, the voice that always roused them." Both these works were originally published in Irish, both have long since been best-sellers and have become classics, and both, I am told, have preserved in translation, much of the flavor and picturesqueness of the Irish original.

Jets and Industry Come to Ireland

THE ISLAND has indeed entered the jet age, since Trans-Atlantic jets make a stop at Shannon Airport. This airport is already a great boon to the tourist industry, and will become increasingly important as supersonic jets haul more and more cargo. Business men, particularly from West Germany, have not been slow to see the advantage of building branch offices and factories in Ireland to take advantage of the labor, in general cheap compared to that in many industrialized areas, yet relatively well trained, or easily trainable. As a latecomer in the field of industrialization, Ireland has certain advantages: capital necessary for establishing industries can be foreign venture capital, and does not have to be generated from savings from a local, already going concern; and capital is invested in modern, efficient plants and up-to-date machinery, not in repairs to used, outmoded plants and equipment.

Ireland's Loss, the World's Gain

THE POPULATION OF IRELAND decreased by half in a century: from roughly 8 millions in 1841 to 4 millions in 1951. Of course, the Great Famine played a role in this decline, but that was a century ago. But emigration continues—more than 24,000 left the island annually between 1946 and 1951, especially for England. The island is poor and not industrialized, so that almost anywhere the Irish go they find more congenial, better-paying work than at home.

And not only for the manual worker. No country on earth has had

so many writers who preferred to live outside their native land: Wilde, Joyce, George Bernard Shaw, Sean O'Casey—the list is long indeed. From Devon, in England, O'Casey fought a running battle with the Irish in Ireland about plays, the Church, censorship, the Abbey and its directors, and theatres in general. James Joyce, too, spent much of his life in exile and felt bitterly enough about his native land to write:

This lovely land that always sent
Her writers and artists to banishment
And in a spirit of Irish fun
Betrayed her own leaders, one by one.

In spite of famine, emigration, and deportation, Ireland has since the 18th century given England the majority of her dramatists.

A recent Irish writer is quoted as saying that "the low marriage rate is our most serious populative problem." A quarter of the population does not marry at all, and the average age of those who do marry is 33 for men and 28 for women.

Epilogue

HAS MIGRATION of so many of its sons and daughters made the island suffer an irreparable loss? Why is it that so many Irish of such diverse backgrounds have chosen to live elsewhere? To be sure there have been economic reasons, better salaries, better living conditions; in short, superior material advantages. But perhaps many have left because they were unwilling to accept the somewhat provincial, hemmed-in, inhibited life in their native heath. They preferred to escape, to try new things, to expand, to live the more abundant life, spiritually as well as materially. The island has thus lost the influence of its turbulent, iconoclastic, even revolutionary sons whose imagination, disregard for the status quo, and genius for politics have played an important role on the broad international stage. They would not conform to the moral and intellectual atmosphere of their tight little island, with its highly rural flavor, prejudices, and overtones. But these factors appear to add to the attractiveness of Ireland to the outsider, who senses that time has almost stood still, that old customs linger on, that life is somewhat unreal, that spirits fly with the winds as they howl across the moors, and that leprechauns frolic around the moss-covered boulders under the trees of weird shapes in the dark, forbidding woods and forests.

Government Subsidy to Higher Education:

The Benefits, Costs and Non-Economic Value of the Policy

By ALBERT J. ROBINSON

IN RECENT YEARS the benefits and costs of higher education have been the subject of considerable discussion. Also much discussed has been whether government intervention is needed to maximize the net benefit of universities and colleges to the community. This paper discusses the nature of the return to investment in higher education, and the relation between government expenditures on higher education and the achievement of national economic objectives.

I

Investment Return

WHEN INDIVIDUALS INVEST by enrolling in college, the return on that investment will comprise three components.

(1) The first type will be the private pecuniary return, which in a market economy will be the additional net income an individual's education enables him to earn over his working life. If some of the pecuniary benefits accrued to other people, the private return would understate the total return, and the rational individual's investment would be less than it would have been if he could have appropriated all the benefits himself. If the government reduced tuition fees by means of a subsidy, then, in the short run, the rate of return to the individual on his private investment would exceed the market rate of return on alternative investments, even though it may have been lower than the market rate if it had been related to the total cost. Private investment in education would therefore tend to increase until the individual rate of return equalled the market rate, and at this point the total stock of educational capital (*i.e.* the number of people with college education up to some given level) would exceed the number who would have been educated to that level if fees had been set equal to the average total cost of education. The rate of return over cost to the individual can be measured and attempts have been made to do so in recent years.¹

¹ See for example Gary S. Becker, *Human Capital* (New York: National Bureau of Economic Research, Inc., 1964); Yoram Ben-Porath, "The Production of Human Capital and the Life Cycle of Earnings," *Journal of Political Economy*, 75 (August 1967), pp.

(2) The second type of return is the spillover effect. If the full return from the individual's higher education accrued to him, then the amount individuals invested in higher education should be of no greater concern to the community than the amount they invested in other ventures. But the community may become concerned if higher education yields external as well as internal benefits. If the individual pays the market rate for investment funds, and this rate represents the real social cost of capital, the existence of external benefits would mean that the total marginal social benefit, though declining, would still be yielding returns over marginal cost to others in the community at the point at which the individual ceases to invest.

Ideally, in such cases, the recipients of external benefits would subsidize the education of those from whom they received such benefits. It would be a problem to identify all the beneficiaries, but more important than this would be the difficulty of getting a satisfactory voluntary system of subsidizing higher education, since it would be in an individual's selfish interest to understate the benefit he thought he received if he believed that his share of the subsidy would be borne by the unidentified other beneficiaries, or if he suspected other beneficiaries were doing this. Consequently, if the external benefits of higher education were large, it might be desirable for the State to subsidize it, provided that the value of the additional benefits exceeded the cost of raising the necessary taxes.

(3) The third component will be the private non-pecuniary return. A college education may be desired for its own sake, even if it makes no direct contribution to the national product. It may also include benefits that are neither investment, nor cultural, nor learning for its own sake (which has led to useful discoveries), but simply consumption. The organized and unorganized social and political activities that most undergraduates participate in are a form of consumption. Cultural activities would also be a form of consumption.²

352-65; Mark Blaug, "The Rate of Return on Investment in Education in Great Britain," *The Manchester School*, 33 (1965), pp. 205-51; R. S. Eckaus, "Economic Criteria for Education and Training," *Review of Economics & Statistics*, 46 (1964), pp. 181-90; W. L. Hanson, "Total and Private Rates of Return to Investment in Schooling," *Journal of Political Economy*, 61 (1953), pp. 180-11; H. H. Hanushek, "Education and Income," *Review of Economics & Statistics*, 41 (1959), pp. 24-31; J. M. J. J. and M. David, "Education and Income," *Quarterly Journal of Economics*, 77 (August 1963), pp. 423-37; B. A. Weisbrod, "The Valuation of Human Capital," *Journal of Political Economy*, 69 (October 1961), pp. 425-36.

² The case for cultural activities at universities, particularly education in the humanities, was stated in 1951 by the Massey Commission: "The humanities, are to be valued for themselves. Not only does a study of the liberal arts give education the mental discipline without which it is meaningless, it gives the student the intellectual curiosity

Other non-pecuniary objectives of college education have been suggested by many people. One of the several committees that has studied the question, President Truman's Commission on Higher Education, stated that general education ought to include education on ethics; citizenship; international understanding; emotional and social adjustment; maintaining good health; understanding and enjoying the arts; preparation for family life; choosing a satisfying vocation; and acquiring skills in critical and constructive thinking.³

These non-pecuniary returns to education are real but must be regarded as incommensurables, benefits "that cannot be expressed in terms of the principal or common unit in any generally acceptable manner."⁴ These benefits cannot be ignored because some students and their parents weight them just as heavily as the pecuniary benefits in deciding upon a college education.

If the government subsidized enrollments, the private pecuniary return to individuals who invested in higher education would be increased and/or more individuals would be able to acquire higher education up to some given standard. In the polar case, assume that the labor market is competitive, and that higher education increases labor productivity but that diminishing returns prevail. Then, if the opportunity cost of the government resources used to subsidize higher education were zero, it would be "efficient" for government to finance the higher education of an increasing number of students until the marginal productivity of college graduates fell to zero. For the individual, this point would be reached when the discounted rate of return to investment in higher education over opportunity cost fell to zero, *i.e.* when

$$R = \sum_{j=0}^n \frac{Y_j}{(1+i)^j} - \sum_{k=0}^n \frac{X_k}{(1+i)^k} = 0,$$

and interest which enrich his life. The purpose of the university is, through a liberalizing education, to enable persons to live more complete lives; this should be true of any training which has a proper place in a university. Academic courses stripped of the humanities lose enrichment as well as discipline. They provide for a living, but not for the life that makes living worthwhile." Royal Commission on National Development in the Arts, Letters and Sciences 1949-51, *Report* (Ottawa: The King's Printer, 1951), (The Massey Report), p. 138.

³ In July 1946 President Truman appointed a Commission on Higher Education, composed of 28 distinguished American citizens, which made 11 major recommendations for general education at the university level. See Gail Kennedy, ed., *Education for Democracy: The Debate over the Report of the President's Commission on Higher Education* (Boston: D. C. Heath & Co., 1952).

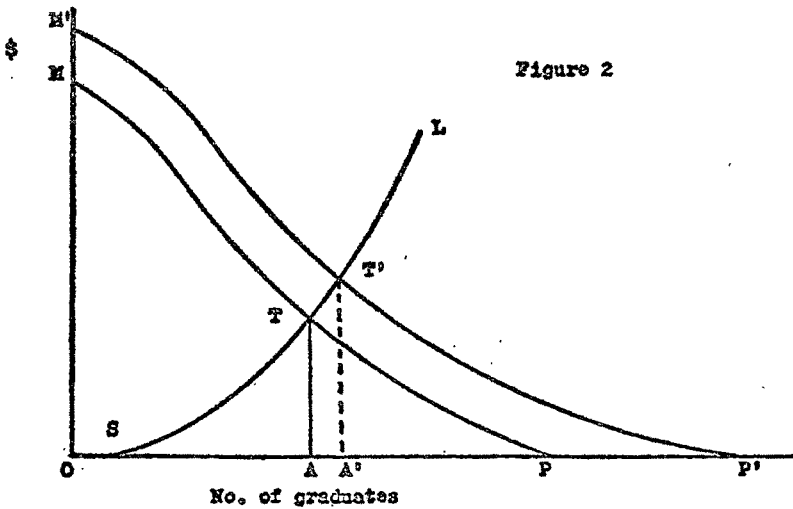
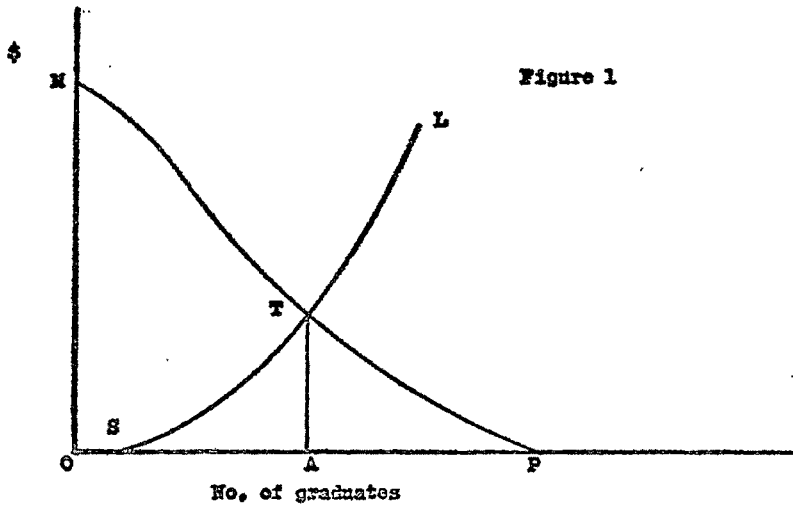
⁴ C. J. Hitch and R. N. McKean, *The Economics of Defense in the Nuclear Age* (Cambridge, Mass.: Harvard University Press, 1965), p. 182.

where Y is the working life earnings stream for the graduate, X is the earnings stream in the employment the graduate would have gone into if he had not gone to college, $k - j$ is the length of the college course and i is the market rate of interest.

The point at which the marginal productivity of graduates reaches zero may exceed or fall short of the complete enrollment of all college-age men and women. Its position would depend on the shape of the education function, showing the relationship between the input of units of higher education and the output of goods and services in the economy. A government would need to know this before it could determine what was the "efficient" number of graduates it should produce.

In the real world, of course, the opportunity cost of government resources is not zero, and the "efficient" number of graduates would be correspondingly less. In Figure 1 the curve MP is the marginal product of university graduates in the economy, which under competitive conditions would be the demand curve for graduates, and SL is the supply curve of recruits into the graduate "industry." Point A represents the "efficient" student enrollment when the opportunity cost of resources is positive, the intersection at T being the point at which the resource cost of educating an additional student is equal to his contribution to the national product. The position of T will vary with the elasticity of the supply of labor possessing university entrance requirements, on the one hand, and the productivity of educated persons on the other. If we assume that higher education does not affect the conditions of supply of labor, the "efficient" level of enrollments will be determined by the marginal productivity of graduates. If the government provided places for OA students, and set fees at AT , the marginal private pecuniary return would be AT , equal to the marginal cost of providing the quantity of education required, and enrollments would be stable at OA . If the productivity of graduates increased, MP would move to the right; and at the new equilibrium both enrollments and the level of fees would be higher.

If externalities exist in higher education, the total productivity of education curve for the economy would be to the right of MP . The relationship between direct and indirect benefits of higher education is not known, but if we assume it is linear, the sum of direct and indirect benefits could be represented by MP' in Figure 2. If the level of fees were set equal to the marginal resource cost $A'T'$, enrollments would be too low because the level of enrollments is determined by the private pecuniary return, which is equal to the private marginal revenue productivity of graduates in the economy. In order to increase enrollments to OA' the gov-



ernment could bear some of the cost of investment in education, for example by providing loans at interest rates below the market rate, perhaps on a graduated basis as income rises, which would be equivalent to subsidizing it in the right. So if there are substantial externalities in higher education, a case could be made by subsidizing enrollments. The main question that would arise would concern the opportunity cost of the funds used to

subsidize enrollments—would the value of the external benefits produced by the additional enrollments be greater than the value of output those funds could have produced in some other sector of the economy?

Non-pecuniary private returns would be added to the pecuniary returns to education. This would mean that at any level of fees, more students would enroll than would be indicated by the marginal value productivity of higher education alone. In terms of Figure 1, private non-pecuniary returns would move SL to the right; and at a fee of AT, more students than OA would wish to enroll.

In considering the case for public subsidization of enrollments in higher education, the private non-pecuniary returns and the indirect benefits tend to cancel one another. On the one hand, because graduates do not enjoy personally all the economic benefits of their education, the total of individual investment in higher education will fall short of the level that would provide maximum economic benefits to the community as a whole. For this reason, a case could be made for supplemental investment in higher education by government. On the other hand, students do enjoy personally the non-pecuniary benefits of higher education, and these tend to increase enrollments beyond the level which would yield the highest average incomes for individuals. If the external benefits of higher education were relatively unimportant,⁵ these non-pecuniary benefits would provide a government with some justification for restraining investment in higher education. In practice, no policy decision ought to be taken until some method of evaluation of the two effects takes place. While this may confront the policy-maker with diametrically opposed alternatives, *i.e.* whether to subsidize enrollments or to restrain them, a prior decision would be involved, namely whether the number of students enrolled in higher education is really a legitimate concern of governments at all. Governments should determine whether university education contributes to the achievement of national or community objectives which are within the legitimate scope of government concern. The following discussion considers the relation between higher education and two of the major ob-

⁵ If we examine the kind of indirect benefits that have been attributed to higher education, it is clear that some of them would be provided in a fairly efficient manner by the educated individual, such as his family, neighbors or colleagues. Other indirect benefits attributed to education, such as contributing to a more flexible labor force, providing an environment receptive to research, encouraging lawful behavior and political responsibility, are effects that arise in a developed economy, in which other conditions such as high per capita income, political stability, occupation and social mobility may be as important as education. For a compilation of the indirect benefits of education, see M. Blaug, "The Rate of Return on Investment in Education in Great Britain," *The Manchester School*, 33 (September 1965), p. 234.

jectives adopted by modern governments—economic growth and the improvement of income distribution.

II

Economic Growth

IF ECONOMIC GROWTH were a major policy objective, increased investment in higher education could be considered as a contribution to its achievement. In this event, planners would need to know how much an increment in the stock of education would increase the level of national output. Edward F. Denison, noting that additional education has been associated in the United States with increased earnings, assumed that three-fifths of the reported income differentials were due to differences in education as distinguished from the other characteristics associated with increased earnings, and concluded that increased inputs of education had made a major contribution to United States economic growth.⁶ Moreover, in Denison's view, the relationship between education and output was still positive, so that lengthening of the period of schooling of the labor force would increase the U.S. rate of growth further: for example, a one-year extension would raise the 1960–2010 growth rate by 0.1 points.⁷ Denison did not isolate the specific contribution of higher education, but he assumed that it would be greater than the lower levels of education because the income differentials associated with higher education were larger.

The proposition relating education and economic growth could be stated as

$$Y = f(E)$$

where Y is gross national product and E is a measure of the capital stock in education, but such a statement would not be sufficiently precise for guidance of policy. Even if it were accepted that more education had led to a higher level of national output in the past, little could be said about education and further increases in the national product without knowing the shape of the education function.⁸ If increasing the capital stock in education consisted exclusively of increasing the number of graduates, then the residual estimates of Denison and others would be useful for policy purposes if it could be assumed that an extra year of education at any level (elementary, secondary, or post-secondary) would induce a proportionate increase in national output. The proportion of the relevant age

⁶ EDWARD F. DENISON, *The Sources of Economic Growth in the United States and the Alternatives Before Us* (New York: Committee for Economic Development, 1962), pp. 69–73.

⁷ *Ibid.*, p. 277.

⁸ It should be noted that Denison's results do not necessarily hold in other countries. In Canada, which is more closely integrated with the U.S. than any other country, shares

groups with elementary and secondary education has been increasing, and as it does, the gain from further increases in the proportion will tend to diminish. Already in advanced societies elementary education is universal, and the point may soon be reached at which all the young people who are physically and emotionally capable of doing high school work will be enrolled in high school. This point may be close in the United States,⁹ and may be reached when the high school "drop-out" problem has been overcome. When it has been reached, further gains in national productivity from increasing educational inputs (of given quality) may have to be brought about by increasing the number of students enrolled in higher education.

But even if there is a positive relationship between education and economic growth, it would not be a sufficient condition of economic growth just to increase the number of graduates, because the number of graduates would not be an adequate measure of educational output. The quality of their education is important, and two aspects of the question can be distinguished.

First, within higher education there are many disciplines, and the contribution to output of a graduate of one may differ from that of another. If $E_1, E_2 \dots E_n$ represent the various disciplines, we might be able to estimate the yield of national product per student graduated by discipline E_1 . But for policy purposes, we would need to know whether this yield was a constant or a diminishing or an increasing function of total graduations by discipline E_1 ; and also how this yield of E_1 was affected by different levels of graduation by disciplines $E_2, E_3 \dots E_n$. For example, if discipline E_1 were mathematics, we might observe that additional graduates were associated with increased increments of national output, but this result might not have come about if the output of complementary mathematics-

most U.S. economic values but has a lower per capita income than the U.S., calculations made for the Economic Council of Canada showed that increased educational attainment was relatively less important for growth than in the U.S. (about one quarter of the increase in per capita income 1911 to 1961, compared with more than two fifths in the U.S.). Economic Council of Canada, *Second Annual Review: Towards Sustained and Balanced Economic Growth* (Ottawa: Queen's Printer, 1965), p. 92. Denison's calculations for nine western countries, mainly in Europe, show an inverse relationship between inputs of education and growth of national income in the period 1870-63. H. F. Denison, *Why Growth Rates Differ: Factors Explained in Nine Western Countries* (Washington, D.C.: The Brookings Institution, 1967).

⁹ Enrollment in Grades 9-12 in U.S. secondary schools in 1965-1966 comprised 93 per cent of the population aged 14-17 years of age, compared with 80 per cent in 1953-1954, 73 per cent in 1939-1940, 51 per cent in 1929-1930, 15 per cent in 1909-1910, and 7 per cent in 1889-1890. U.S. Office of Education, *Digest of Educational Statistics 1965* (Washington: 1965), p. 14. The school leaving age in the U.S. is at least 15 years of age, and up to 18 years of age in some states. *World Survey of Education* (Paris: UNESCO, 1959), p. 818.

using disciplines such as engineering, economics and statistics had not increased as well, and the output of these may have depended on the state of industrial development and the demand from industry for these skills. These interdependencies would not readily be revealed by regression analysis.

In general discussions of public policy in education, these interdependencies are usually not considered at all, since academic disciplines are divided into two broad categories, the sciences and the humanities. We might expect that a policy of increasing the rate of economic growth would have some effect on science graduates, because growth means primarily the growth of physical output, and science graduates are people trained in the skills associated with physical production. But this does not necessarily mean that in order to increase the national product we must increase the number of graduate scientists. Japan has managed to achieve the highest rate of growth in the western world by applying in Japan the scientific research done by non-Japanese scientists. Great Britain, on the other hand, officially encourages science in the universities, but the increased output of science graduates has not resulted in more growth but in a brain drain of scientists to North America. Canada also exports science graduates to the United States, so that increasing the output of science graduates may not result in increased output but in increased emigration.¹⁰

A further point is that even if the differential contribution of the various disciplines to growth in the past could be discovered, the forecasting of future demand in a dynamic economy is subject to considerable uncertainty. This was one of the problems faced by the Robbins Committee on Higher Education in Great Britain. As Lord Robbins put it:

What cannot be admitted is the possibility of forecasting changes in technical knowledge and the changes in demand which are the consequences thereof. . . . The fact that we can say in a general way that knowledge is likely to advance is not good enough for our purposes. To estimate future demand for various types of skill we need to know much more than that; and, in the absence of such knowledge, all hope of any but the broadest long-term extrapolations of aggregate "need" or demand must rest upon delusion.¹¹

The second aspect of this problem involves the allocation of resources *within* disciplines. Given the distribution of funds among disciplines, variations could take place in (i) the number of students graduated and (ii) the quality of students graduated. Indexes of the quality of student education would be the ratios of faculty, physical plant, library resources

¹⁰ Brinley Thomas, "Modern Migration," in W. Adams, ed., *The Brain Drain* (New York: The Macmillan Co., 1968).

¹¹ Lord Robbins, *The University in the Modern World* (London: Macmillan, 1966),

and laboratory equipment to students, and *ceteris paribus* they would normally move in the opposite direction to the number of students graduated. Variations could also take place in (iii) the quantity and (iv) the quality of faculty research, an increase or decrease in either or both involving a corresponding decrease or increase in services to students. For the university as a whole (v), general services to students, such as scholarships, residences, subsidies to student activities and the like would be competitive with student education and faculty research.

Thus even if a positive relationship exists between the size of the national product and the number of college graduates, the relationship could not be specified without determining the optimum mix of educational expenditures among disciplines and among activities. If it were possible to specify a set of coefficients $e_1, e_2, e_3 \dots e_m$ ($e_1 + e_2 + e_3 \dots e_m = 1$) for the optimum distribution of expenditures among disciplines, additional sets of coefficients would need to be computed for each possible division of university expenditures among these five categories.

The question was whether a government implementing a policy of economic growth should transfer resources into higher education on the ground that their productivity would be higher there than in other areas of the economy. If it could be assumed (a) that enrollments at the lower levels of education had reached saturation, and (b) that the positive relationship discovered by Denison for the U.S. would prevail, and (c) that the quality of education could be held constant, then expenditure to increase enrollments might increase the rate of growth. The extent of such an increase would depend upon the distribution of enrollments among disciplines, some distributions being more productive with respect to output than others. This may be a problem which we could leave to the market to solve; presumably the relative productivities of the various disciplines would be reflected in salary differentials among their graduates, in which case, given a student body well informed about the labor market and freedom of high school graduates to enroll in any discipline, any maldistribution among disciplines should be minor and temporary.

p. 20. The Robbins Committee estimated "the supply of potential talent rather than the demand for trained skills," hoping that a high proportion of educated people would supply the demand. "There is a high degree of uncertainty in such estimates, however, 'the numbers actually coming forward must depend, not only on the extent and nature of public assistance . . . but also on a comparison of the relative advantages of the acquisition of higher education and of the other opportunities available.'" Robbins admits that "there is nothing in the nature of things which brings it about that the number of persons who will be educated on these principles corresponds with the number of persons whom it would be worth while educating in order to promote the fastest growth of GNP"; however, he would "in no way accept the maximization of growth of GNP as necessarily the final criterion of policy." *Ibid.*, pp. 21-2.

The main difficulty here would be in holding the quality of education constant. At what level should it be held constant? If we could assume that the quality of education was conterminous with the intensity of education, *i.e.* is a function of faculty teaching hours per student; library and laboratory resources per student, etc., we could set up some arbitrary standards for all to follow. However, we do not know whether the presumed favorable effects of higher education upon growth achieve their effect by wider dissemination of existing knowledge or by advancing the frontiers of knowledge. There is a presumption in favor of the former, since the great bulk of college and university activity is the dissemination of existing knowledge, the learning by students of known principles and techniques which are applied in the outside world after graduation. The discovery of new knowledge is carried on by a relatively few scholars in a few research centres, and their discoveries are communicated in learned journals and meetings to which all have access.¹² If higher education does produce growth, the former aspect would surely dominate, if only because the volume of knowledge in toto is now so great that even a major breakthrough in one discipline would be relatively insignificant for the economy as a whole. If dissemination of knowledge contributes more to growth than research, then educational policy for growth may call for some moderation of the existing high undergraduate standards rather than a raising of average standards of education for the majority of students. It would also call for less emphasis upon faculty research and more emphasis upon increasing the faculty time and university resources spent on teaching. A lowering of average standards in order to increase economic growth would of course conflict with the traditional goals of educational policy, and a reduction of the research/teaching ratio for faculty would be expected to have an adverse effect upon teaching efficiency.¹³

¹² The centers of new knowledge may actually be outside the country. For example, the work of Canadian universities is almost entirely confined to dissemination of knowledge. See Harry G. Johnson, "Canadian Contributions to the Discipline of Economics Since the War," Address to the Annual Meeting of the Canadian Political Science Association, Ottawa, 1967. Individuals with a propensity to discover new knowledge usually migrate temporarily or permanently to the major research centers, most of which are located in the United States. The new knowledge they produce is then published for the benefit of disseminators and appliers. Scott and Grubel point out that "most scientists move to countries where conditions of work are better for them. . . . As a consequence of such emigration by scientists, the native countries not only obtain the scientific knowledge free, but they are actually likely to get more than they would have had the men stayed at home. . . . This tends to benefit countries other than the one in which it is first put to use." H. G. Grubel and A. D. Scott, "The International Flow of Human Capital," *American Economic Review*, 56 (May 1966), p. 274. See also A. J. Robinson, "The Bladen Commission and Graduate Education," *Canadian Journal of Economics & Political Science*, 34 (November 1966), pp. 520-25.

¹³ See G. J. Stigler, "Specialism: A Dissenting Opinion," *The Intellectual and the Market Place* (New York: The Free Press of Glencoe, 1963), pp. 14-16.

Although it may be difficult to link higher education and economic growth, university enrollments are strongly associated with per capita income,¹⁴ which suggests that a high level of enrollments may be a *result* of economic growth rather than a cause. The lower private cost of obtaining a degree, due to the higher real incomes of parents and maintenance of fees at low levels by subsidies, has resulted in a shift of the supply curve of university graduates to the right. The increased supply would tend through competition in the labor market to reduce the wage rate for graduates, and employers could be expected to hire more graduates at the lower wage than in the days of greater graduate scarcity.

Undoubtedly employers would prefer graduates to non-graduates at the same wage, so that the university degree may have come to be used as a screening device. When only a small proportion of the population graduated from high school, specification of high school graduation as a condition for employment enabled an employer to select from the top quality stratum of the labor force. But as the level of education in the labor force has risen, the employer needs to specify additional conditions if he wishes to continue to recruit from the top stratum of the labor force. Since the supply of graduates has increased and the real wage of graduates has fallen relative to earlier periods, specification of college graduation as a condition for employment would enable an employer to continue to use education as a screening device. The use of the degree in this way would be the result of an increase in the supply of graduates, and would not necessarily indicate a commensurate increase in the value productivity of graduates.

Another reason for the use of the degree as a screening device is the high cost for employers of acquiring a catalogue of information on each job applicant complete enough to enable his work performance to be predicted: this cost is so high relative to the value of employee productivity that resort has to be made to some index of potential, and in practice the level of educational attainment probably provides a reliable index of ability, motivation and work habits. It seems clear, therefore, that there is no simple functional relationship between higher education and economic growth that would justify the use of higher education by a government as an instrument with which to pursue the objective of increasing economic growth. At this point we should do what Lord Robbins would recommend, namely throw out economic growth as a policy objective if it conflicts with expenditures planned for higher education. I propose to look at a second major objective of modern governments, redistribution of income, and consider the effects of higher education on that objective.

¹⁴ David C. McClelland, "Does Education Accelerate Economic Growth," *Economic Development and Cultural Change*, 14 (April 1966), p. 259.

III

Income Distribution

A BENEFIT that sometimes is claimed to justify the subsidization of higher education is that it makes higher education more accessible to lower income families, which increases upward mobility, and hence tends to improve the distribution of income. Schultz¹⁵ argues that an increase in investment in human capital relative to nonhuman capital would increase earned income relative to property income, thus tending to reduce income inequality and at the same time avoiding some of the disadvantages of the tax-transfer method of reducing income inequality.

We have noted that government subsidization of higher education may take several forms, and they would not all improve accessibility to higher education for lower income groups to the same extent. A subsidy which reduced student fees would probably increase accessibility to higher education more than any other form of subsidy, though this might not be the type of expenditure that was most favorable to economic growth. At the lower level of fees, students who would have attended college at the unsubsidized level of fees would enjoy an increase of consumer surplus, and income would be released to be spent in some other way. Additional students who would consider the rate of return over cost profitable only at the lower level of fees would earn higher incomes than they would have in the absence of the subsidy, though the average income for all graduates would probably be lower. These additional students might include some from lower income groups, but since it is the return to investment in education relative to the cost that determined how much education an individual will purchase, there is nothing in the procedure of reducing the cost of education that would ensure that it benefitted only lower income groups. An equal increase in the benefits of higher education, with no change in the level of fees, should have the same effect on enrollments. Indeed, where there is discrimination in hiring, as occurs with women and certain racial groups, demand for such educated persons might be inelastic, in which case discounted rate of return on investment in higher education could be so low that even with a reduction in its costs, the net benefit would still be no greater than in occupations requiring less education.

The redistributive effects of increasing enrollments in higher education could also be limited by social influences on education. The most important social influence on higher education is the home environment, which is most important in getting the student (a) to recognize the feasibility of

¹⁵ Theodore W. Schultz, *The Economic Value of Education* (New York: Columbia University Press, 1963), p. 65.

higher education, (h) to acquire the necessary aptitudes and skills needed for academic work, as opposed to manual work, (c) to obtain the secondary education needed to meet university entrance requirements. Moreover (d), the education-oriented family usually assists the student in the financing of university education. As Blaug observes, one of the parameters of the demand function for education is the taste for education, which itself is a function of the education of parents.¹⁶ The inherent tendency towards a student population biased towards well-to-do families is borne out by empirical studies of the parental backgrounds of undergraduates.¹⁷

So even if we accepted the proposition that to increase university enrollments by means of subsidy would be to accelerate economic growth, it is not certain that it would also improve income distribution. For some people, such a policy would transform a previously unprofitable investment into a profitable one, but there is no reason to suppose that this group would include the people who would be beneficiaries if the funds had been used to provide income transfers and other orthodox welfare programs.

IV

College Education as a Public Consumption Good

THE PRECEDING REMARKS CONCERNED the distribution of additional income produced in the economy by graduates of higher education. However, some of the benefits enjoyed by educated people are what I have called the non-pecuniary returns to investment in education, returns that are primarily of a consumption nature. Could a government justify subsidization of consumption which is enjoyed only by a privileged minority?

It would perhaps be possible to justify such a subsidy if the consumption by-products of higher education could be treated as public consumption, similar to the services provided by public parks, highways or free chest x-rays. But the first condition for the provision of public consumption goods is that they be available to everyone on the same terms, each individual being free to enjoy them or not, according to his taste.¹⁸ Clearly higher education is not available to all individuals on the same terms: the conditions for admission to a college include not only the payment of fees, but also competence in certain scholarly skills. Intelligence in the special

¹⁶ Mark Blaug, "Education: A Framework for Choice" (London: Institute of Economic Affairs, 1967), p. 39.

¹⁷ For example, John Porter, *The Vertical Mosaic* (Toronto: The University of Toronto Press, 1965), Ch. VI; P. H. Karmel in E. L. Wheelwright, ed., *Higher Education in Australia* (Melbourne: F. W. Cheshire, 1965), p. 70.

¹⁸ P. A. Samuelson, "The Pure Theory of Public Expenditure," *Review of Economics and Statistics*, 36 (November 1954), p. 387.

sense in which academics understand it, aptitude for study, interest in scholarship and motivation are not qualities possessed in equal measure by all individuals. Even if student fees were eliminated, these other conditions would exclude a large proportion of the population.

The restrictions are designed to reserve the resources of colleges and universities to people with the ability and motivation to acquire the peculiar skills they offer. If these institutions are to retain their role of leadership in the acquisition and dissemination of knowledge in the community, they *must* restrict entry, either on financial or intellectual grounds, and these restrictions per se imply that they could not legitimately be regarded as suppliers of a public consumption good.

Subsidies to higher education may take other forms than increasing enrollments. Funds could be used to raise the quality of graduates, to finance faculty research, and to buy scientific equipment and library material. Such expenditures might increase economic growth, but since they would also divert more resources to an already privileged minority, they would make higher educational institutions even less like suppliers of public consumption goods than if enrollments were subsidized.

The same thing could be said of government expenditures to improve the consumption benefits of students, such as by providing more and/or better residences, more cultural amenities and more athletic facilities. Life would be more enjoyable for the students enrolled, but national output would be lower to the extent that these funds could have been used more productively elsewhere in the economy. Moreover, they would tend to increase rather than decrease income inequality, though the net effect would depend on the extent to which the services provided were self-financing.

The subsidization of higher education does not therefore seem to be an efficient instrument for reducing inequality of income as usually understood, *i.e.* between the lowest income groups and the highest, and would probably be inferior to more orthodox welfare measures. The evidence we have is sparse and inconclusive. It may be that although government expenditures on higher education would do little for the lowest income groups, they may improve upward mobility for the middle income groups.

V

Conclusion

WHAT IS LEFT of the economic case for increased expenditures by governments on higher education, particularly the provision of more and more free places at colleges and universities? Most undergraduates expect that their degrees will be passports to professions that enjoy high income and

high prestige. This expectation was usually fulfilled in the days when graduates were scarce, and the relatively high cost of higher education in those days maintained this scarcity. But if the supply of graduates is increased by government intervention, while the demand for graduates increases at a much slower rate, fewer and fewer graduates will be able to find accommodation in their chosen professions. They will be forced to accept jobs with income and prestige levels not significantly higher than they could have attained without a college degree. We can speculate about the political repercussions of a large increase in the number of frustrated intellectuals in the population.

Perhaps it is the non-economic benefits of higher education rather than the economic benefits that justify large-scale government intervention. If we accept this view, it will be necessary to change our traditional attitudes, particularly the expectation that increased learning inevitably leads to increased income. We will have to convince students that higher learning is of great value in itself, even if it brings no material reward. An economist cannot be anything but skeptical about the possibility of persuading young people to accept this view.

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Reconciling Growth and Environmental Protection

IN AN ADDRESS at the Colloquium on Economic Growth held by the National Bureau of Economic Research in San Francisco in December, 1970, Representative Henry S. Reuss of Wisconsin called attention to one of the great challenges of our times.

"The question we should ask," said Representative Reuss, "is not 'Do we want growth?'; it is 'What kind of growth?'"

Zero economic growth might help our environment but the social costs are unacceptable, Mr. Reuss noted:

"If we want a habitable planet and growth, too, we have to start by re-defining growth to reflect improvement in the quality of life as well as material increase."

Mr. Reuss urged that the bureau press ahead on the research it has begun on ways to quantify our concern about the environment and to integrate the numbers into a revised system of national accounts. We need accounting on environmental gains and losses and we need to know more about the economics of pollution control and the reuse of waste materials, he argued. This is an argument economists and other social scientists have been raising and it is good to see it taken up by our statesmen.

W.L.

The Utopian Economics of Sir Thomas More

By JAMES W. PARK

ALTHOUGH SIR THOMAS MORE's *Utopia* was not the first presentation of an ideal commonwealth, it is perhaps the most widely known and read work of its kind. *Utopia* was originally printed in Latin in 1516, and the first English translation appeared in 1551. Other translations have appeared since that time,¹ the most modern being that by Father Edward L. Surtz in 1964.²

Utopia is divided into two Books. Book I is concerned mainly with the political, social, and economic conditions in 16th Century England. In his criticism of existing economic conditions, More discusses the problems associated with unemployment, oligopoly, distribution of property, and money. Book II presents an ideal commonwealth.

During the past four and one-half centuries, critics, in search of More's reasons for writing *Utopia*, have picked the Utopian skeleton bare. Consequently, there are various interpretations of the economic formulations presented in *Utopia*. These interpretations tend to fall within three broad groups. There are those who believe that More simply was not interested in presenting a complete, workable production and distribution system. The system presented, according to this group, resulted as a logical consequence of his "messages." A second group maintains that perhaps a practical system does exist, but that it is submerged within the social framework of the ideal commonwealth and cannot be fruitfully isolated. Members of a third group say that because of the economic formulations appearing in *Utopia* More favored a certain type of economic system; but these critics disagree as to the system he favored. More has been considered as: (1) an advocate of early Christian communism, (2) a proponent of medieval economics, (3) a champion of mercantilism, (4) a prophet for modern socialism and communism, and (5) an exponent of capitalism.

I do not propose to rework prior interpretations of the Utopian economy. Instead, one of my objectives is to analyze the economic institutions appearing in *Utopia* by using a new "tool kit" that can be applied to economies where market exchange is not the dominant transactional mode.

¹ Other translations include those by H. V. S. Ogden (1949); G. C. Richards (1923); Harold and Zoe Paget (1909); and Gilbert Burnet (1684), reprinted by H. Morley (1885).

² St. Thomas More, *Utopia*, translated and edited by Edward L. Surtz, S. J. (New Haven: Yale University Press, 1964).

This kit includes the principles of reciprocity, redistribution, and administered trade.³

A discussion of Utopian economics would not be complete without mentioning More's analysis of the economic problems of 16th century England. Therefore, a second objective of this study is to present More's analysis of the problems associated with unemployment, oligopoly, valuation of money, and a very unequal distribution of income and wealth.

This study of More's economics is divided into two major parts: market economics and non-market economics. The division roughly follows that used by More in Book I and Book II of *Utopia* respectively.

I

Book I

Unemployment. More analyzes two causes of unemployment—the first is associated with the farm problem. Most of the existing unemployment, according to More, is due to the enclosing of land, which had been held and used in common, for raising sheep. The unemployed farm workers seek work, but none is to be found. Consequently, they are forced to beg and steal for a living.⁴ The landlords had discovered that huge profits could be made by raising sheep and exporting the wool to the weavers of Flanders and Italy.⁵

In the meantime, while the enclosures had been carried out, the prices of goods had been rising. More saw that the supply of food had been decreasing because of the enclosing of the land for sheep. He states: "And this is also the cause that victualles be nowe in many places dearer."⁶

The farm workers were not the only ones who were involuntarily unemployed because of the enclosures. Since the price of food had increased, noblemen were encouraged to discharge their servants. "For this great dearth of victualles causeth euery man to kepe as lytle houses and as small hospitalitie as he possible maye, and to put awaye their seruantes: whether, I praye you, but a beggyng? or els, whiche thies gentle bloodis and stoute stomakes wyll soner set theyr myndes vnto, a stealinge?"⁷

³ These principles are described and defined by Karl Polanyi in *The Great Transformation* (Boston: Beacon Press, Inc., 1961); Karl Polanyi, Conrad M. Arensberg, and Harry Pearson in *Trade and Market in the Early Empires* (Glencoe: Free Press, 1957); and George Dalton in the "Introduction" to *Primitive, Archaic, and Modern Economies* (Garden City: Doubleday & Company, Inc., 1968).

⁴ Sir Thomas More, *Utopia*, edited by J. Churton Collins (Oxford: Clarendon Press, 1930), pp. 16-17.

⁵ J. D. Mackie, *The Earlier Tudors, 1484-1558* (Oxford: Clarendon Press, 1952), pp. 449-50.

⁶ *Utopia*, p. 17.

⁷ *Ibid.*, p. 18.

More presented two solutions for the unemployment caused by the enclosures. He recommended "a lawe that they whyche plucked downe fermes and townes of husbandrye, shall buylde them vp agayne or els yelde and vprender the possessyon of them to suche as wyll goo to the coste of buyldynge them anewe."⁸ Also, he recommended a law to prevent engrossing and forestalling in the wool market.⁹

Another cause of unemployment, according to More, was that the price of wool had risen so high that poor people who previously had bought it to make it into cloth could not do so now. Therefore, they were forced into idleness.¹⁰

Oligopoly. Apparently, the profits that could be made by raising sheep attracted many producers into this field. More saw that although there had been a great increase in the supply of sheep, the price did not fall because of an oligopolistic market. "Quod si maxime increseat ouium numerus, precio nihil decrescit tamen; quod earum, si monopolium appellari non potest, quod non unus uendit, certe oligopolium est."¹¹ This is translated by Surtz as follows: "But, however much the number of sheep increases, their price does not decrease a farthing because, though you cannot brand that a monopoly which is a sale by more than one person, yet their sale is certainly an oligopoly. . . ."¹² Apparently, More used the term "oligopoly" in the same way it is used today. One is reminded of the kinky demand curve and a short-run supply curve that shifts within the discontinuous portion of the marginal revenue curve.

Monetary Theory. Most of More's monetary theory appears in Book I and at the end of Book II of *Utopia*. Book I contains a description of how kings could manipulate the value of money to suit their own purposes. More *persona* suggested to Ralph Hythloday that because of his knowledge of government he should become a counselor to kings. In the course of his explanation of why it would be futile for him to do this, Hythloday exhibits an understanding of the evils associated with changing the value of coins.

Suppose that some kyng and his counsell were together whettinge their wittes, and deuisinge what subtell crafte they myght inuente to enryche the king with greate treasures of money. First one councelleth to rayse and enhance the valuacion of money, when the king must paye any; and

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ *Ibid.*, p. 17.

¹¹ *Ibid.*, p. 163.

¹² *Utopia*, ed., Edward L. Surtz, S. J., *op. cit.*, p. 26. Surtz's translation is used because of Collins' inadequate translation of "oligopolium."

agayne to calle downe the value of coyne to lesse then it is worthe, when he must receiue or gather any: for thus great sommes shalbe payde with a lytyll money, and where lytle is due muche shalbe receaued.¹³

More also observed that the hoarding of gold and silver by kings and princes could take enough money out of circulation so that the wheels of industry and trade would not turn as rapidly. Hythloday cites a law of the Macariens who live not far from Utopia. When the king of the Macariens is crowned, he has to take "a solempne othe, that he shall neuer at any tyme haue in hys treasure aboue a thousande pounde of golde or syluer."¹⁴ The thousand pounds would be sufficient to quell rebellions and to provide for the national defense. An early Macarien king "made this lawe to be a stop and a barre to kynges for heaping and hoarding vp so much money as might impoueryshe their people."¹⁵ Also, the Macarien king "thought that by thys prouision his people shuld not lacke money wherewith to maynteyne their dayly occupieng and chaffayre."¹⁶

It was also brought out that hoarding by private citizens could rob money of its circulation. When criticizing the hoarding of gold by individuals, Hythloday asks:

What shall I say of them that kepe superfluous ryches, to take delectacion only in the beholdynge, and not in the vse or occupyenge therof. . . . Or of them that be in a contrary vice, hydynge the golde whiche they shall neuer occupie, nor peraduenture neuer see more; and, while they take care leaste they shall leese it, do leese it in dede? For what is it elles, when they hyde it in the grounde, takynge it bothe from their owne vse, and perchaunce from all other mens also?¹⁷

Near the end of Book II, Hythloday laments the fact that man will be more greedy when money is used than when it is not used. Man is filled with pride, and this causes greed—especially greed for money. The quest for money can bring forth many evils. If money were completely abolished, the following which are directly associated with the use and desire of money would cease: "Feare, griefe, care, laboures, watchinges" and "pouerty."¹⁸

Hythloday also maintains that money has become an instrument that allows the powerful to obtain more than their share of the fruits of production. It was originally invented to enable people to secure a livelihood through exchange; but now, it for some reason people are not able to

¹³ *Ibid.*, pp. 34-35.

¹⁴ *Ibid.*, p. 38.

¹⁵ *Ibid.*

¹⁶ *Ibid.*, p. 39.

¹⁷ *Ibid.*, p. 88.

¹⁸ *Ibid.*, p. 141.

secure enough money for the necessities of life, they starve. This is particularly true when many people have not saved enough to tide them over periods when crops are bad. After a bad crop year, the rich have more than their share of money and have plenty of grain stored up in their barns, but the grain is not available to the starving.¹⁹

In his description of the ideal commonwealth of Utopia, Hythloday points out that no money is used in the domestic Utopian economy. The Utopians have a vast hoard of precious metals that they obtain from foreign trade, but these metals are used primarily for military purposes and for making things other than money. They keep the value of gold and silver (in the domestic economy) down to a level that is consistent with their use value in the production of things other than money. It is man's foolishness, according to Hythloday, that has caused the rise in value of gold and silver (outside Utopia) over their value in use. It is disgusting that they are made more valuable than iron, for iron has a much higher value in use. To compensate for the tendency of man to put such a high value on gold, the Utopians make chamber pots and chains for slaves out of gold. In addition, they put golden rings, crowns, and necklaces on criminals.²⁰

Production and Distribution Theories. Hythloday states that where there is private property, men speak of "the common wealth; but euerye man procureth hys owne pryuate wealthe."²¹ The individual is forced to pursue his own interests at the expense of society as a whole or else he might starve even "though the commen wealthe floryshe neuer so muche in ryches."²² The pursuit of self-interest is regrettable because individuals begin to ignore the needs of others.

Hythloday also brought out the fact that where there is private enterprise and a money economy some production may not be devoted to the necessities of life—the goods and services that represent true pleasure. "For where money beareth all the swing, ther many vayne and superfluous occupations must nedys be vsed, to serue only for ryotous superfluyte and vn honest pleasure."²³ Among those engaged in vain and superfluous occupations where no real benefits accrue to society are the gentry, goldsmiths, and money lenders.²⁴

Individuals whose occupations do benefit society do not necessarily

¹⁹ *Ibid.*, pp. 141–142.

²⁰ *Ibid.*, pp. 76–77.

²¹ *Ibid.*, p. 138.

²² *Ibid.*

²³ *Ibid.*, p. 62.

²⁴ *Ibid.*, p. 138.

receive rewards in proportion to the benefits they provide to society.

For where euerye man vnder certeyne tytles and pretences draweth and plucketh to himselfe asmuch as he can, and so a fewe deuide amonge themselves all the riches that there is, be there neuer so muche abundaunce and stoore, there to the resydewe is lefte lacke and pouertye.²⁵

The farmers, common laborers, blacksmiths, carpenters, and carters do not receive their just share of the fruits of production although they produce more than the gentry.²⁶

More saw that the rich, through luxurious living, were providing employment for many people. In addition, he was aware of the difficulties involved in shifting the factors of production away from the unessential occupations resulting from these luxurious expenditures. Hythloday states that if the workers were taken out of the non-essential occupations in a private enterprise system and were put in essential occupations, there would be such an increase in the supply of goods that prices would drop considerably. Consequently, there would be widespread unemployment. The only way to circumvent this unemployment problem, according to Hythloday, would be to do away with private property and the market system. Then, all eligible workers would be required to contribute to essential production. Now, an excess supply of goods could be prevented by having people work fewer hours per day.²⁷

Near the end of Book I, More *persona* provides a weak defense of private enterprise and Hythloday admits that the existing conditions could be "sumwhat eased" by legislation.²⁸ However, in Book II an ideal commonwealth is described—one with institutions that would eliminate the economic problems presented in Book I.

II

Book II

Reciprocity. In their quest for producing and distributing the necessities of life, the Utopians behave in ways that are similar to the principles of reciprocity that are defined and described by Polanyi and others. Polanyi's definition of reciprocity is "socially obligatory gift-giving."²⁹ This concept is similar to the exchange of Christmas gifts in the western world. A good or service given to one individual is never regarded as a debt to be repaid.

²⁵ *Ibid.*, p. 44.

²⁶ *Ibid.*, p. 139.

²⁷ *Ibid.*, pp. 62-63.

²⁸ *Ibid.*, pp. 44-45.

²⁹ George Dalton, "Introduction" to *Primitive, Archaic and Modern Economies* (Garden City: Doubleday & Company, Inc., 1968), p. xxxv.

tioned reciprocal act. Reciprocity is not applicable only to two individuals or to two groups—many individuals and groups may be involved. However, for reciprocity to integrate an entire economy, there must be symmetrically arranged groupings.

Three, four, or more groups may be symmetrical in regard to two or more axes; also members of the groups need not reciprocate with one another but may do so with the corresponding members of a third group toward which they stand in analogous relations.³⁰

Some of the groups that could be symmetrically organized are as follows: kinship, neighborhood, military, religious, and occupational groups.³¹

Reciprocity works best in close-knit societies. According to Polanyi, it is more readily found in societies organized on the basis of kinship, but it is not necessarily limited to kinship-organized societies.³² Integrative reciprocity will emerge when there is frequent "mutuality" between individuals or groups.³³

Reciprocity does not demand a mathematically equal response, and the reciprocal gift has only to be adequate and appropriate. The response does not have to be made instantly.³⁴

Agriculture seems to be organized reciprocally in *Utopia*. There are 54 cities—each depending to a great extent on the surrounding countryside for food and raw materials. The cities are at least 24 miles apart, and each has at least 12 miles of countryside in all directions.³⁵ The rural households provide the city units with free agricultural goods, and the city units provide the rural units with free goods that are not produced in the rural areas. This is accomplished in the following manner. The farm households consume their share of the goods they produce and either carry or send the remainder to the redistribution centers in the cities. When the agricultural units find that "thynges be lackynge in the countrey, all suche stuffe they fette out of the citie; where without anye exchange they easelye obteyne it of the magistrates of the citie. For euerye moneth manye of them goo into the cytie on the hollye daye."³⁶ This sharing of the produce between the rural and urban Utopians is similar to the reciprocity between cultivators and artisans that Walter C. Neale found in his study of an Indian village.

³⁰ Polanyi, Arensberg, and Pearson (eds.), *Trade and Market in the Early Empires*, pp. 252-53.

³¹ *Ibid.*, p. 253.

³² *Ibid.*, p. 252.

³³ *Ibid.*, p. 251.

³⁴ *Ibid.*, p. 73.

³⁵ *Utopia*, p. 50.

³⁶ *Ibid.*, p. 52.

The artisan was supplying the cultivator with his skills, and the cultivator in turn, and regardless of the specific services the artisan had performed for him, supplied the artisan with agricultural products.³⁷

Reciprocity can also be found in the practice of sharing the burden of agricultural labor "in turn" in Utopia. Labor of this type is considered difficult, and each year half of the city families and half of the farm families change places.³⁸

The entire Utopian economy seems to be integrated by reciprocity among the 54 cities. Each of the cities sends three men yearly to the Senate at Amaurot. These men have information as to the kinds and quantities of goods needed in the cities, and

assone as it is perfectly knowen of what thynges there is in euery place plentie, and agayne what thynges be skant in anye place; incontinent the lacke of the one is performed and fylled vp with the aboundaunce of the other. And this they doo frelye without any benefite, takyng nothing agayn of them to whom the thinges is geuen; but those cyties that haue geuen of their store to anye other cytie that lacketh, requyrryng nothyng agayue of the same cytie, do take suche thinges as they lacke of an other cytie, to whome they gaue nothyng.³⁹

According to Dalton, production as well as distribution can be organized on the basis of reciprocity.⁴⁰ And it seems production in Utopia is organized around reciprocal relationships. For instance, it has been established that reciprocity works best in economies organized on the basis of kinship. It would seem that Utopia is indeed organized on this basis. For example, the households (containing 40 people) are, as nearly as possible, composed of members who are related to one another. With a static population (the excess emigrates) and the passage of time, the households become related. As a matter of fact, "the hole ilande is as it were one famelie or housholde."⁴¹

Production is also encouraged by the fact that the young are brought up in their father's occupation because "they be naturally therto bente and inclined."⁴²

The Utopians call their officials "fathers" and "willingly exhibite vnto

³⁷ Walter C. Neale, "Reciprocity and Redistribution in the Indian Villages: Some Notable Discussions," in Polanyi, Arensberg, and Pearson (eds.), *Trade and Market in the Early Empires*, op. cit., p. 228.

³⁸ *Utopia*, pp. 50-51.

³⁹ *Ibid.*, p. 74.

⁴⁰ George Dalton, "Theoretical Issues in Economic Anthropology," *Current Anthropology*, Vol. 10, No. 1 (February, 1969), p. 73.

⁴¹ *Utopia*, p. 74.

⁴² *Ibid.*, p. 60.

them dewe honoure, without any compulsion."⁴³ It is these officials who make sure that the Utopians do their share of the work. In fact,

The chyefe and almoste the onelye offyce of the Syphograuntes ys to see and take hede that no man sytte ydle, but that euerye one applye hys owne crafte wyth earneste delygence; and yet for all that not to be weryed from earlye in the mornynge to late in the euennynge wyth contynuall woorke, lyke laborynge and toylunge beastes.⁴⁴

At least in one situation the Utopians are rewarded for their work with praise. They are required to work six hours a day in their usual occupation, and they may devote some time to intellectual development. However,

yf any man had rather bestowe thys tyme vpon hys owne occupatyon (as yt chaunceth in manye, whose myndes ryse not in the contemplatyon of annye scyence lyberal), he is not letted nor prohibited, but is also praysed and commended, as profitable to the common wealthe.⁴⁵

The Utopians find themselves outside the social system if they do not contribute their proper share of production. They have "litle libertie . . . to loyter" and no "cloke or pretence to ydelness."⁴⁶ Since "they be in present sight, and vnder the eyes of euery man; so that of necessitie they must other applie their accustomed labours. . . ."⁴⁷

The Utopians cannot shirk their duties by traveling. If a Utopian desires to leave his job and travel to another city, he must obtain a leave of absence from the proper officials. If he stays away from his work for more than a day, he must perform his tasks at the place he visits. If a worker leaves his city and surrounding area repeatedly without permission, he becomes a slave. Travel within the countryside surrounding a city also requires a Utopian to obtain a leave from his father and his wife. While traveling, the Utopian is not given food "untill he haue wrought out his forenones taske, or els dispatched so much worke as there is wonte to be wrought befor supper."⁴⁸

The religious beliefs of the Utopians facilitate the reciprocal exchange of goods and services. The Utopians believe that to withdrawe somethynge from they selfe to geue to other, that is a pointe of humanitie and gentylnes; whiche neuer taketh a waye so much commoditie, as it bryngeth agaynge. For it is recompensed with the retourne

⁴³ *Ibid.*, p. 105.

⁴⁴ *Ibid.*, p. 60.

⁴⁵ *Ibid.*, p. 61.

⁴⁶ *Ibid.*, p. 74.

⁴⁷ *Ibid.*

⁴⁸ *Ibid.*

of benefytes; and the conscience of the good dede, with the remembrance of the thankfull loue and beneuolence of them to whom thou hast done it, doth brynge more pleasure to thy mynde, then that whiche thou has withholden from they selfe could haue brought to the bodye.⁴⁹

Redistribution. Reciprocity is facilitated by the redistribution of goods. Dalton interprets Polanyi's definition of redistribution as "obligatory payments to central political or religious authority, which uses the receipts for its own maintenance, to provide community services, and as an emergency stock in case of individual or community disaster."⁵⁰ Redistribution presupposes "allocative centers" where people can bring their produce to be redistributed.⁵¹ It is dependent upon some degree of "centricity" in the society. "The institutional pattern of centricity . . . which is present to some extent in all human groups, provides a track for the collection, storage, and redistribution of goods and services."⁵² Once the goods are collected, they are redistributed by the central authorities "by virtue of custom, law, or *ad hoc* central decision."⁵³ Neale provides a convenient summary of this concept:

Redistribution means that the produce of the group is brought together, either physically or by appropriation, and then parcelled out again among the members. Again there is no implication of equality of treatment, fair share, or payment for values. The social pattern is characterized by centricity—peripheral points all connected with the central points.⁵⁴

The centricity in Utopia is provided by the fact that the farm households either carry or send their produce to the public warehouses in the Utopian cities. The produce is then distributed to the city dwellers. Conversely, the products of the artisans in the cities are redistributed to the city dwellers and the rural households. Vegetables, fruit, bread, fish, fowl, and meat are transported to the market places where they are distributed to the stewards of the communal dining halls. First, however, care is taken to see that the sick confined to the hospitals get their share. Then consideration is given "to the prince, the byshop, the tranibours, and to ambassadours, and all straungers. . . ."⁵⁵ In the communal dining

⁴⁹ *Utopia*, p. 80.

⁵⁰ Karl Polanyi, "The Economy as Instituted Process," in Karl Polanyi, Conrad M. Arensberg, and Harry W. Pearson (eds.), *Trade and Market in the Early Empires* (Glencoe: Free Press, 1957), p. 252.

⁵¹ Polanyi, *The Great Transformation*, *op. cit.*, p. 49.

⁵² Polanyi, "The Economy as Instituted Process," *op. cit.*, p. 253.

⁵³ Walter C. Neale, "Reciprocity and Redistribution in the Indian Village," in Polanyi, Arensberg, and Pearson (eds.), *Trade and Market in the Early Empires*, p. 223.

⁵⁴ *Utopia*, p. 69.

halls, the food is served first to old men—then it is divided equally among the others.⁵⁶

In the Utopian market places, "it is not to be feared lest any man wyll aske more than he needeth."⁵⁷ This is because there is no conspicuous consumption in Utopia. Pride is the cause of conspicuous consumption, and pride has no place among the Utopians.⁵⁸

Perhaps it should be pointed out that distribution of goods is simplified in the Utopian economy because production is limited to certain types of goods. They produce only the "thynges that maye be requysyte other for necessitye, or for commoditye; yea, or for pleasure, so that the same pleasure be trewe and naturall."⁵⁹

Administered Trade. Certain aspects of Utopian foreign trade are similar to some of the patterns of trade that, according to Polanyi, exist in primitive and archaic economies. Specifically, those Utopian patterns of foreign trade which are similar to Polanyi's concepts of administered and gift trade will be analyzed here.

According to Polanyi, trade in primitive and archaic economies is not usually an internal affair. It involves the long-distance carrying of goods and is politically administered and regulated not by separate individuals but by organized groups.

Since on both sides the import interest is as a rule determinative, trading runs through government-controlled channels. The export trade is usually organized in a similar way. Consequently, the whole of trade is carried on by administered methods.⁶⁰ The following, among others involved in administered trade, are controlled by governments: rates, port facilities, storage, trading personnel, and credits. Exchange rates are agreed upon by the governments and tend to remain stable over the years.⁶¹

Polanyi also finds that foreign trade in the archaic redistributive empires was organized on the principle of reciprocity (gift trade).⁶²

The Utopians maintain a vast hoard of gold and silver for national security purposes. They obtain most of these metals through foreign trade.

The chief planning authorities in Utopia maintain a two years' supply of grain in storage and export the remainder. Their other exports con-

⁵⁶ *Ibid.*, p. 71.

⁵⁷ *Ibid.*, p. 68.

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*, p. 63.

⁶⁰ Polanyi, "The Economy as Instituted Process," *op. cit.*, p. 262.

⁶¹ *Ibid.*

⁶² *Ibid.*, p. 256.

sist of "honnye, wulle, flaxe, woode, madder, purple die felles, waxe, tallowe, lether, and liuyng beastes."⁶³ The Utopians, in turn, import metals not mined domestically—iron, gold, and silver.⁶⁴ Although More's description of foreign trade is not complete, it appears that trade is not on the individual level. For example, the necessary credit arrangements are made by the Utopian authorities and the representatives of the cities with whom they trade. In addition, higgling and haggling are not involved beyond a certain point in the negotiations because the Utopians ask only a reasonable, moderate price for their goods.⁶⁵

The Utopians prefer to transport their exports and imports in their own ships. "Also suche thynges as arre to be caryed owte of their lande, they thyнке yt more wysedome to carrye that geer furthe themselves, then that othere shoulde come thether to fetchе yt; to thentente they maye the better knowe the owte landes of euerye syde them, and kepe in vre the feat and knouledge of saylinge."⁶⁶ The Utopians exchange their goods for the metals mentioned above, and when these metals are carried to Utopia they are carried by the Utopians themselves. Consequently, few foreign merchants visit Utopia.⁶⁷

The Utopians do not bring all of their gold and silver home to hoard. Once they have what they consider a sufficient hoard of these precious metals, it makes no difference to them whether they receive the metals or instruments of credit for their exports. The instruments of credit have to be guaranteed by each city with which they trade. The Utopians "neuer followe the credence of pryuat men, but the assureaunce or warrauntise of the hole citey, by instrumentes and writings made in that behalfe accordinglye."⁶⁸

Foreign trade provides the Utopians with opportunities for gift giving. When the credit instruments come due, it is the job of the foreign city to collect the money due. The city gathers "vp the debte of the priuate dettours, and putteth it into the common boxe, and so long hathе the vse and proffytte of it vntyll the vtopians their creditours demaunde it."⁶⁹ Thus the city obtains free use of Utopian capital. In addition, the Utopians do not even call for the principal interest they need to lend money.

⁶³ *Utopia*, p. 75.

⁶⁴ *Ibid.*

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*, p. 98.

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*, p. 75.

⁶⁹ *Ibid.*

the fact that the Utopians give one seventh of all exports to the poor of the country to which they are exporting.⁷⁰

The Utopians have excellent port facilities. There is one major port where only the Utopians can pilot a ship through the channels. Then there are other harbors where "the landing is so suerly defenced, what by nature and what by workmanshpy of mans hande, that a fewe defenders maye dryue backe many armies."⁷¹

The Utopians are easy to trade with, but when they feel that they have been cheated, they "wreake their anger by absteyning from occupieng with that nation, untill they haue made satisfaction."⁷²

III

Conclusion

Utopia WAS WRITTEN at a time when the economic order was changing, and apparently More did not like some of the social evils that he believed were caused by the changes. Consequently, he was highly critical of the new order and suggested solutions by presenting an ideal commonwealth. Until recently, reliable tools needed to analyze the economies of ideal commonwealths were not available.

Polanyi's principles of reciprocity, redistribution, and administered trade provide tools for analyzing economic systems without self-regulating pecuniary markets that set prices, allocate resources, and distribute income and wealth. Various passages in *Utopia* seem to indicate that production and distribution in Utopia are organized on these principles.

An analytical framework including the principles of reciprocity and redistribution has been found to be useful in the study of several economies of record where market exchange is not the dominant transactional mode. A partial list includes: Ancient Greece,⁷³ feudalistic societies,⁷⁴ primitive African economies,⁷⁵ and the Trobriand economy.⁷⁶ In addition, Creighton Gabel presents a case for the use of the principles of

⁷⁰ *Ibid.*

⁷¹ *Ibid.*, p. 49.

⁷² *Ibid.*, p. 111.

⁷³ M. I. Finley, "Wealth and Labor [in Archaic Greece]," *The World of Odysseus*, Chap. 3 (Ithaca: The Viking Press, 1954), reprinted in George Dalton (ed.), *Tribal and Peasant Economies* (Garden City: The Natural History Press, 1961), pp. 10-11.

⁷⁴ George Dalton, "Economic Theory and Primitive Society," *American Anthropologist*, Vol. 63, No. 1 (February, 1961), p. 10.

⁷⁵ George Dalton, "Traditional Production in Primitive African Economies," *Quarterly Journal of Economics*, Vol. 74, No. 3 (August, 1962), pp. 360-78.

⁷⁶ George Dalton, "Economic Theory and Primitive Society," *American Anthropologist*, Vol. 63, No. 1 (February, 1961), p. 9.

reciprocity and redistribution in the study of prehistoric societies.⁷⁷

The production and transactional modes of reciprocity and redistribution may be present but not be the dominant modes in some societies. For example, market exchange is presently the dominant mode in the United States,⁷⁸ although one could cite examples of reciprocity (gift giving) and redistribution (aid to the poor). It would seem likely that these modes could be used to analyze those sectors of the United States economy and especially those of the Russian economy where market exchange is not the dominant mode. In addition, there are many other ideal commonwealths that could be fruitfully studied with the aid of this type of framework.

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⁷⁷ Creighton Gabel, *Analysis of Prehistoric Economic Patterns* (New York: Holt, Rinehart and Winston, 1967), pp. 56-59.

⁷⁸ George Dalton, "Primitive Money," *American Anthropologist*, Vol. 67, No. 1 (February, 1965), p. 46.

Progress in Tax Reform

IN MANY NORTH AMERICAN STATES and cities taxes are being continually changed. But it cannot be said that taxes are being reformed. In most cases the changes are the result of crisis financing. Far from being reformed the kinds and levels of taxation are being made ever more regressive. The sentimental liberals in power will do anything for the poor except get off their backs. The great shame and scandal of our times is that we are taxing the poor to bribe the poor not to demand simple justice in economic legislation and in the structure of public finance.

But this is not true everywhere. An example is Horsham City in the Wimmera Division of Victoria, 203 miles northwest of Melbourne, Australia.¹ In its 5,939 acres live 10,900 people. It has 4,221 properties subject to real estate taxation, including 3,252 sites improved with dwellings and 700 vacant lots. In 1963 a referendum was held on whether the practice of taxing both land and buildings should be reformed in favor of the taxation of land values only. It was voted down, 2,898 to 4,978, 63 per cent opposing. The campaign for land value taxation continued and in 1969 a second referendum was held. This time won by a vote of 4,157 to 1,107, 64 per cent favoring the change. Some of the business-
men who opposed the change supported it.

W.L.

The Park as a Determinant of Property Values

By WILLIAM S. HENDON

THIS PAPER is the result of a three year study conducted in Dallas and Fort Worth, Texas, to determine the impact of parks of various types upon the values of residential properties.¹ The proxy for value which was used was assessed value for properties in both cities as developed by the two City Assessors. The study of the situation in Dallas was undertaken first with the study in Ft. Worth a kind of followup on the results in Dallas to see if these results were applicable to another community.

The analysis in the present study was limited to the impact that the individual park might have on property values of properties near or within the use area of the park. Thus, the park may be an external value determining factor on the values of properties near or adjacent to it. Parks might cause either an increase or a decrease in the values of such properties.

The limitations to the property analysis include the fact that data was collected only on properties quite near the park (within about 5 blocks) and included only about 700 properties around each of the parks analyzed. This meant that the property analysis did not extend as far as did the zone of park use (service area). Thus the relations measured may not be taken as a complete analysis of the functional relationship between park proximity and property value. It is known that a segment of relationship was measured, but there were not sufficient means nor sufficient data collected to determine the extent of the total dimension or geographic area around each park in which property values are affected.

Another limitation to the analysis was that there appeared to be no logical way to relate the study of property values to areas which were not primarily residential. Assessment data on housing in most communities is of considerably higher quality than assessment data on commercial properties. An additional problem was that logically, commercial properties themselves can be a significant determinant of the value of nearby residences; thus, the zone of use of a given park might well extend into a mixed residential and commercial area. In trying to eliminate all the value factors of an external nature except the influence of the park, the segment around each park was necessarily small, homogeneously residential in character.

¹ William S. Hendon, James W. Kitchen and Bruce Pringle, *The Sociological and Economic Impact of Urban Parks in Dallas, Texas, 1966* (Lubbock: Texas Tech Press, 1967).

I

Property Values in Dallas

THE TECHNIQUES OF ANALYSIS of property values around each park included correlation analysis and two forms of comparison of mean values. All the analyses related property values to distance from the park.

Correlation Analysis. After investigation of some of the scatter diagrams of property value and distance of the property from the park, it appeared that the relationship could be characterized as linear. Therefore an application of simple linear correlation was applied to two estimates of property valuation and the distance that each property lay from the park. Total assessed values and land values were correlated with distance from the park. Not all such correlations were significant and among those which were (based on a significance test of the coefficients of correlation) there was considerable variation.

Among the playgrounds studied, all but one generated a positive influence on values of properties in the area of the park (Table 1). In no case was the influence large and indeed it should not be. Logically, the park ought to be a minor part of the total value impact upon residential properties, yet there is little doubt that some parks included in the study enhanced the values of adjacent property.

Among the playgrounds, Casa View and Garrett Parks had the greatest significant positive impact upon property values, both in total assessed value and land value correlations. Though yielding significant results, Garrett Park was too near several large commercial facilities for the results to be meaningful. Casa View on the other hand was attached to a school. Since most schools serve to be a negative value determinant on properties near them, the meaning of the Casa View result must be regarded with some caution. This park was developed before the majority of houses in the area were built. Thus it appeared to have exercised some influence on the character of the neighborhood.

Only one playground appeared to have an adverse influence on property values. Preston Hollow Park was in a high income neighborhood where the mean value of homes was about \$23,000. In short, this park does not appear to be either an aesthetically pleasing nor as well maintained as the homes in the area, and thus property values suffer.

Comparison of Mean Values: I. For the same sample of parks, an analysis was made on a comparative basis of the mean assessed values of properties within 500 feet of the park and properties within the sample group, but more distant from the park. This analysis yielded results which

tended to verify the correlation analysis explained in the previous section.

When mean total assessed value was determined for properties within 500 feet of the park, it was obvious that generally the park had an impact upon the value of properties near the park (Table 2). Again, it appears that the impact varies from distinctly adverse effects to slightly positive effects. In the Preston Hollow neighborhood, the playground had an adverse effect that was quite high. In this high income neighborhood, properties close to the park were adversely affected. For example, the mean values of properties within 500 feet of the park were assessed at an average of about \$9,000 while properties further away from the park were assessed at an average value of \$11,200. The detrimental character of the park appears to lie in its appearance relative to the rest of the neighborhood. Probably if the appearance were improved, by planting or some form of redesign, the adverse effect would be diminished.

It seemed to be true, in all cases, that the aesthetically pleasing park (one which had an attractive design, was well maintained, and highly landscaped) caused an increase in property values of properties around the park, relative to other properties. In all of the seven playgrounds, the parks which were well shaded, well designed and were of pleasing appearance had a positive impact, while those which were poorly designed had an adverse effect upon the property values.

Adverse effects of the park on property values ran between 10 and 20 per cent. That is, on the average properties which were adversely affected by being close to a park had values which typically ran about 80 to 90 per cent of other properties in the neighborhood. These figures related only to properties which were under 500 feet from the park as opposed to those which were over 500 feet from the park.

Where the park had a positive influence upon property values, the properties within 500 feet of the park were generally 5 to 20 per cent higher in values than properties greater than 500 feet from the park. These percentage figures typically were born out in the land value comparisons of the same kind.

Based on this analysis only the large community playfields normally contribute to increases in property values. The degree of this influence varied greatly among the playfields, but the relationship was consistently apparent for all. Generally, the properties around playfields were of higher value than were properties more distant and yet still within the same zone.

Among playgrounds, results appeared to differ. Playgrounds, because of their small size, appear to impinge on property values in most cases.

Properties immediately on the periphery of the playground are of lesser value than other properties within its service area.

Comparing these results with the correlation analysis it becomes apparent that among all types of parks, the playfield fares well in the total zone analyzed. Parks that appeared to have a consistently positive influence on property values included all the playfields except Exline. Playgrounds on the other hand appeared sometimes to exert a negative influence on all properties including the ones adjacent to the park according to the comparison of means; the correlation obtained the same result.

In conclusion, it appears that the community playfield, because of its large size, generally acts to increase property values of properties immediately adjacent to it while the playground generally decreases the values of similar properties.

Comparison of Mean Values: II. The extent of the value relationship between the property values and their access distance to the park is not possible to establish simply from the correlation analysis. The correlation analysis, of course, shows only the strength of the relationship.

The difference estimate is based on comparing the mean value of all properties within the nearest $5/7$ of the total distance away from the park of all properties sampled, with the mean values of properties within the more distant $2/7$ of the area away from the park.² The bulk of properties closest to the park are compared to the properties most distant from the park among all the properties sampled. In effect, the total curve is divided into two segments and the mean of one segment is compared to the mean of the other. Ideally, if we assumed that the service area was also comparable to the value influence area of the park, then it should be possible to measure the extent of the value influence by dealing with all properties in the known service area.

The logic of such a relationship is that the value influence of the park on properties is a function of use. The only other really significant positive impact of parks on property value would be among those properties which had an "aesthetic benefit" due to the vista that the park provides. If the vista is no longer there (as in the case of all properties not adjacent to the park) then the value impact must come from the value of use, real or expected. Thus, it is logical that if the park influence benefit which exists is in two forms, the aesthetic and the utilitarian, then the service area by definition would be the extent of the location bounds of the influence of the park on property values.

² The choice of fractional splitting at $2/7$ and $5/7$ was arbitrary, but was selected by an inspection of graphs of value and distance for given parks.

Unfortunately, in the case of the present study, an estimate of this total impact throughout the service area was not possible for the reason that too many factors enter the picture once we move a certain distance away from the park. These externalities enter the picture before we reach the limit of the service area; thus the separation of the park value from other value factors in this study was not possible except in the case of those properties which were close to the park. The selection of homogeneous neighborhoods was one of the criteria in the selection of the park sampled. In rare instances would it be possible to trace the value impact out to the extreme limits. It would be possible only if measurement of the park influence factor could be undertaken; as, for example, in the case of a neighborhood park in an isolated and brand-new subdivision.

The second mean values comparison revealed that properties within the zone of influence of the park generally had higher values than properties which were assumed to be somewhat out of the zone of influence (Table 3).

Parks which appeared to have little impact (either positively or negatively) on properties within the zone of influence included Hattie Rankin Moore and Sleepy Hollow. Both low-income, non-white areas, it appeared that the park exerted an influence similar to that found in the correlation analysis. Thus, significant differences in property values appeared to exist among properties located near, as opposed to properties located at a greater distance from playfields, while among the playgrounds, the relationship was not as strong, but was generally negative.

II

Property Values in Fort Worth

ONE ADDITIONAL FACET of the property analysis was to compare the impact that parks in Dallas had on surrounding property with the impact that parks in the other large city in that region, Fort Worth, had upon their near properties. Three parks were selected at random in the City of Fort Worth for investigation. These parks were Eastover, Marine, and Rosemont.

Eastover Park is a park of 13.5 acres located on the east side of Fort Worth. The neighborhood surrounding the park is essentially low-middle income of residential character with a predominantly Negro population. ~~There are no unusual features to the park.~~ It contains two developed baseball fields, a water fountain, and play equipment.

Marine Park is a park of 12 acres in an older section of the north side of Fort Worth. The park contains play equipment, an adult pool, rest-

rooms, and shelter as well as several picnic tables and benches. Large trees shade the picnic areas in this park which was acquired in 1894. The surrounding neighborhood can be classified as low to middle income and predominantly White.

Rosemont Park is located on the south side of Fort Worth bordering a large boulevard. Although predominantly residential in character, the park is located near some commercial property as well as some underdeveloped land. The 30.4 acre park, acquired in 1927, contains tennis courts, two baseball fields, a handball court, play equipment, shelter and restrooms, and a tennis center which serves the entire community.

Method. The same basic method as used in other sections of the report on property analysis was used. Tax data were gathered from the City Assessor's office in Fort Worth on properties from the selected quadrant. Once gathered the tax data were placed on punch cards and correlation analyses run, using the facilities of the Texas Technological College Computer Center.

Results. When correlations were run between access distance to the park and property value, (where value is the dependent variable), certain significant relationships were discovered. (Table 4) Land value correlated significantly with distance in the cases of Rosemont Park and Eastover Park but not in Marine Park. (Table 4) On the other hand, total assessed values were significant correlaries to access distance in the cases of Eastover and Marine but not in Rosemont. Thus, land values and total assessed values were consistently correlative to access distance to the park only in Eastover Park.

Results are confusing except for the single point of this analysis. The purpose of this segment of the analysis was to discover if parks in Fort Worth appeared to influence the values of properties around them. The result in this case was affirmative. On the other hand, the results do not appear to be consistent when land value correlation was compared with total assessed value correlations. This same occurrence exists in Dallas. It appears that, only when the relationship between value and distance is strong, does the direction and significance of the relationship hold.

When the relationship is low but significant in the case of either land or total value, it may well be that the other will be insignificant. Value relations with access distances depend very heavily upon the strength of the given correlation; if the relationship is not strong, results will tend to be inconclusive. The analysis undertaken shows some of this tendency. These correlations are not high and, indeed, if they were quite high, it would be a bit curious. Very high correlations would have indicated that

the park was an immensely important value determining factor for residential properties. Although parks are important to a neighborhood, they are not as important as other variables such as the neighborhood itself, the location of schools, the transportation available, shopping and other determinants.

Some suggestion must be made as to why the strong relation sometimes applies and sometimes not at all. Variations in the strength of the correlations might be related to the strength of the market for residential real estate in the neighborhood. If there is low activity in the market for houses in the area of the park, then there might be a low relation between property value and access distance to the park. Conversely, if the market is active and strong or if it is appreciating, the relationship may be strong. It would appear that market conditions in the residential areas, in short, upward movement of sale prices or frequent turnovers in property would logically be reflective in the value determinants; the park, of course, is one such determinant. In an inactive market, there would likely be less correlation between values and the value determinants than usually conceived because the current values are reflective more of past changes than current. If time enters the picture, it probably does so at this point.

Time lags in market frequency (turnover of real estate) would leave the assessor with less market data from which to make his appraisal of the area; thus, his assessment would likely be conditioned by what has been "traditional" in the past. If the frequency of turnover is great, then the assessor can readily have available to him the current sales data necessary for land and total value assessments. If the foregoing has validity then the relation between the park and property value where the correlations are insignificant is likely due to limited market data and "traditionalized" variations. While the neighborhood changes, the assessor has only limited knowledge of the change.

A second form of analysis, hypothesis testing, reveals that there are significant differences in the mean total values of properties within 500 feet of the park and mean total values of properties more distant. Generally the properties near the park will be relatively more valuable than like properties which lie more distant from the park. The analysis here was consistent with the results of the correlations where Rosemont and Marine Parks aided property values but Eastover actually lowered values. In Marine and Rosemont Parks the mean value of properties within 500 feet of the parks are of significantly greater value than are properties more distant from the parks. (Table 5) In Eastover Park, properties within 500 feet of the park are actually lower in value on the average than were properties more distant.

In any event, it would appear that some parks in Fort Worth influence property values of residential properties much to the same degree that parks in Dallas do. The impact is not strong, but it is there. It can be positive or it can be negative and in some cases the relationships can be insignificant. Significant relationships appear to be the most common occurrence, and may be reflective of the strength of the market for real estate in the area.

III

Property Values and Parks

THE RELATIONSHIP between proximity to the park and property values must be somewhat inconclusive. It is neither logical nor profitable to speculate about this relationship to the point of determining the full extent of the relationship, namely the per cent of total value of a property which is attributable to the park. Further investigation beyond the scope of this study is required.

On the other hand, certain conclusions can be stated. First, it appears that there is little profit to the notion of creating special tax assessments on properties near a proposed or existing city park facility. The reasoning is simply this: if a property is assessed adequately, then it would be likely that the estimate based on a notion of "fair market value" would be obtained. If the assessment is made under such considerations, then it would of necessity include the impact of the park and its consequent effects. Thus, there is little justification for the introduction of a special assessment district for park purposes unless we assume the local assessor to be incompetent.

A second and very persuasive conclusion follows from the analysis undertaken. There is little doubt that the park, if well designed, attractive, and of a size similar to most playfields in Dallas and Fort Worth, will indeed contribute to enhance property values and consequently an expanded tax base.

Probably more importantly, the park can have a stabilizing influence on property values of residences, thereby creating a kind of stabilizing force in the area for prices of real estate. With deflation of property values a common problem in most communities, the park can assist both property owners and the city in their respective needs for stable values and stable revenue sources.

General conclusions from the analysis are as follows:

1. Normally parks exert either a positive or a negative effect upon the property values of parcels close to the park.

2. The positive effect appears to be from 5 to 20 per cent higher; that is, for properties within 500 feet of the park, these proportions are higher in value than for properties over 500 feet from the park.
3. The adverse effect appears to be from 10 to 20 per cent. That is, properties within 500 feet are proportionally lower in value than properties more than 500 feet where the park affects property values adversely.
4. Both positive and adverse effects are seen in the kinds of improvements to the lots. That is, an aesthetically pleasing park will stimulate better quality and better maintained housing units close to the park. The adverse effect works in the opposite direction. If the park is not well maintained and well designed, then properties adjoining the park will likely follow the pattern.
5. The distance that the park affects the property value is likely to be about the same as the service area of the park, except in the case of large parks.
6. Redevelopment of the park may well influence increased development of the neighborhood assuming that the neighborhood is not in an area of blight.
7. The time of development and acquisition are significant to the impact that the park may have upon subsequent property values. That is:
the acquisition of the land, the development of the land and the completion of the park, are all interrelated with the time of development of the neighborhood.
thus, the development of a park prior to the final development of the neighborhood would likely have the greatest subsequent positive impact upon property values.
from a property value impact standpoint, the park should be developed immediately after the development of the subdivision is initiated. The extent of this development however is also conditioned by the expected use of the park. Thus the park designed should attempt to balance use and property impact in the proper mix. This is accomplished by the timing of and the extent of development relative to the neighborhood development.
8. The impact on land values is relatively more significant as compared to the impact on the total value of properties.
9. The relative impact of the park on property values is different among various economic groups; thus, the impact appears to be greatest among high-valued residential properties, and lower as the property is of lesser value.

TABLE 1

Simple Linear Correlation Analysis of Residential Land Value and Total Assessed Value of Properties to Distance from the Nearest Park, by Park

Type of Park	Land Value and Distance		Total Assessed Value and Distance		Number of Properties
	Coefficient of Correlation	Significant at .01	Coefficient of Correlation	Significant at .01	
<u>Playgrounds</u>					
Casa View	-.109	Yes	-.078	Yes	644
Beckley Heights	.060	No	.024	No	101
Hattie Rankin Moore	.085	No	.047	No	480
Sleepy Hollow	.610	Yes	-.034	No	94
Preston Hollow	.580	Yes	.212	Yes	670
Garrett	-.158	Yes	-.155	Yes	811
Oak Cliff	.119	Yes	-.051	No	450
<u>Playfields</u>					
Harry Stone	.002	No	-.064	Yes	902
Pleasant Oaks	-.238	Yes	-.405	Yes	676
Beckley-Saner	-.196	Yes	-.162	Yes	744
Martin Weiss	0	N.A.	-.101	Yes	1,003
Exline	.114	Yes	.033	No	707

Source: Computed from sample data.

TABLE 2

Mean Assessed Values of Properties Within 500 Feet of the Park Compared to Mean Assessed Values of Properties More than 500 Feet from the Park: Properties Around 10 Parks in Dallas, Texas

Type of Park	Properties Within 500 Feet		Properties Over 500 Feet		Ratio of 4 to 2 Over 500 Under 500
	Mean Assessed Value	Number of Properties	Mean Assessed Value	Number of Properties	
<u>Playgrounds</u>					
Casa View	\$3,637.00	128	\$3,778.00	485	.963
Beckley Heights	3,390.00	141	4,197.00	760	.808
Hattie Rankin Moore	1,372.00	179	1,528.00	301	.898
Sleepy Hollow	2,683.00	39	2,556.00	55	1.051
Preston Hollow	9,039.00	154	11,207.00	516	.806
<u>Playfields</u>					
Harry Stone	\$5,058.00	195	\$5,040.00	707	1.003
Pleasant Oaks	4,880.00	171	5,874.00	494	1.181
Beckley-Saner	3,436.00	250	2,742.00	494	1.253
Martin Weiss	3,335.00	262	3,258.00	741	1.024
Exline	2,382.00	113	2,254.00	594	1.057

Source: Computed from sample data.

TABLE 3

Mean Assessed Values of Near Properties to the Park Compared to Mean Assessed Values of Properties More Distant From the Park for 10 Parks in Dallas, Texas, by Park

Type of Park	Mean Value of Properties Within 5/7 Total Distance of Measured Zone ³	Feet in 5/7 Zone	Mean Value of Properties Within 2/7 Most Distance Zone	Feet in 2/7 Zone
<u>Playgrounds</u>				
Casa View	\$ 3,688	1,050	\$ 3,224	700
Beckley Heights	3,760	1,850	3,300	650
Hattie Rankin Moore	1,265	1,050	1,257	400
Sleepy Hollow	2,500	1,050	2,600	400
Preston Hollow	10,360	1,750	10,740	700
Garrett ¹	--	--	--	--
Oak Cliff ²	--	--	--	--
<u>Playfields</u>				
Harry Stone	4,985	2,000	4,321	800
Pleasant Oaks	5,950	1,600	3,640	650
Beckley Saner	2,800	1,350	1,880	500
Martin Weiss	3,160	1,750	2,900	700
Exline	2,080	1,050	2,200	700

¹Not included in the analysis because of large commercial properties in zone.

²Not included in the analysis because of river bed on one of the three sides of the park.

³The section of 5/7 and 2/7 is arbitrary. For each park, maximum distance of property values collected was determined and then subdivided into two zones. The near zone consisted of all properties within the area near the park and including all properties in the nearest 5/7 of the total distance. The 2/7 consisted of properties at the outer edge of the zone of properties for which data was collected around each park.

Source: Computed from sample data.

TABLE 4

Simple Linear Correlation
Analysis of Residential Land Value and Total Assessed Value to
Access Distance From the Nearest Park, for Three Parks in
Fort Worth, Texas, by Park

	Coefficient of Correlation	Significant at .01	Number of Properties
<u>Eastover Park</u>			
Access distance correlated with:			
Land Value	.411	Yes	194
Total Value	.319	Yes	194
<u>Marine Park</u>			
Access distance correlated with:			
Land Value	.046	No	210
Total Value	-.172	Yes	210
<u>Rosemont Park</u>			
Access distance correlated with:			
Land Value	-.203	Yes	243
Total Value	-.137	No	243

Source: Computed from Sample Data.

TABLE 5
Comparison of Mean Value of Properties Within 500 Feet and Over 500 Feet
From Three Fort Worth Parks

	Mean Value Over 500 Feet	Number of Properties	Mean Value 500 Feet and Under	Number of Properties	Difference Significant at .01
Rosemont Park	5729.03	184	6562.58	59	Yes
Marine Park	4565.02	162	5571.32	48	Yes
Eastover Park	7358.94	165	6419.69	29	Yes

Source: Computed from Sample Data.

Toward Cost-Benefit Analyses of Development

A FORMULA FOR DETERMINING the kind of development that is most likely to produce revenue surpluses or deficits for a community is presented in *Urban Land*.¹

In an article, "Who Pays for What: A Cost Revenue Analysis of Suburban Land Use Alternatives," two planners, Darwin G. Stuart and Robert B. Teska, explore this problem and develop a basic framework for such a cost-revenue analysis.

Their guidelines were developed and applied in Barrington, Illinois, a suburb of Chicago. They are applied to the impact of four classifications of land use—single family residential, apartment residential, industrial, and commercial—on the cost of providing school services for kindergarten through 12th grade.

School services was the category of government costs selected by the authors for analysis because most other services are subject to varying and complicated factors including tax inequities, soil and topography problems, overlapping agencies, and jurisdictional conflicts. However, the authors observe, "A concentrated focus on local school services appears to be most relevant, productive, and appropriate . . . data on the school cost-revenue impact of varying land uses are not difficult to isolate and the analysis of these data is relatively uncomplicated."

The analysis indicates that, as far as school costs are concerned, generally units with more than three bedrooms and apartments with more than two bedrooms would generate a tax deficit, while research industries and large shopping centers result in tax benefits. [S. H. Kasper for the Institute.]

¹ *Urban Land* is the monthly publication of Urban Land Institute (ULI), 1200 18th Street, N.W., Washington, D.C. 20036. ULI is an independent, non-profit research and educational organization which studies and reports on innovations and trends in land use, planning, development and urban economics.

*Progress and Poverty's Continuing Challenge**

By JAMES M. ROBERTS

HENRY GEORGE IS CONSIDERED one of the most influential of American economists. In his book *Progress and Poverty* (1879), he demonstrated that monopoly and privilege are at the roots of the economic and social problems that persist in spite of the advanced technology of our day, as they have been in every society in which they appeared.¹

During his life he lectured extensively in the United States and Great Britain and wrote numerous articles, pamphlets and books concerning his social and economic principles and their application. George's influence may also be traced to Australia, China, Canada, Denmark and Germany. His first and most important book, *Progress and Poverty*, has been translated and is currently available in at least nine foreign languages. Theodore Roosevelt and Woodrow Wilson were among many who expressed high regard for Henry George and his work. Leo Tolstoy is quoted as saying that

People do not argue with the teaching of George; they simply do not know it. And it is impossible to do otherwise with his teaching, for he who becomes acquainted with it cannot but agree.²

Henry George was born in Philadelphia on September 2, 1839, the son of middle-class, first generation Americans of Scottish and English descent. George's informal education ended early in his life and his thought and its logic were developed almost exclusively through his own observations and experiences—on a voyage around the world, in mining camps and print shops, and in such cities as San Francisco, New York and Philadelphia. And it was only after he had formulated his ideas and that he turned to the work of others to complete and fortify his argument.³

* I am grateful to Thomas F. Bergin, Calvin Woodard and John H. Moore of the University of Virginia for their helpful discussion on this topic. Needless to say, however, responsibility for the views expressed is my own.

¹ Nicholas Murray Butler has pointed out that this teaching has passed into economic theory everywhere. Commencement address, Columbia University, June 2, 1931 (New York: Columbia University, Office of the Secretary, 1931).

² Harry G. Brown, editor, *Significant Paragraphs From Henry George's Progress and Poverty* (New York: Schalkenbach Foundation, 1931), p. 81.

³ See, V. Webster Johnson and Raleigh Barlowe, *Land Problems and Policies* (New York: McGraw-Hill Publishing Co., 1954), p. 317.

The basic ideas of Henry George were contained in the thought of John Locke in his treatment of the doctrine of natural rights and the idea that the right of property is justified only by personal labor; by the physiocrats of France, who proposed the *impôt unique* to appropriate a substantial part of the net product of land; and by a number of pamphleteers of the 18th and 19th centuries, including Thomas Spence in a 1793 pamphlet,

It might be noted, although there are those who would deny it, that the problem of *individual existence* for the majority has not changed much from the time of George's work. Further, since George drew largely from the circumstances of life as he knew and observed them, *Progress and Poverty* is as relevant today as the day it was written.

The thought of *Progress and Poverty* is of sufficient scope to qualify as an economic philosophy and some instances of ready acceptance of George's philosophy, particularly in the United States can be shown (as in the adoption of the anti-trust laws). However, his work and its most specific proposals stir great resistance and controversy. Even those who consider his proposals must finally reject them on some illogical ground or forfeit their standing as economists. There is nothing so implacable as ideological enmities which breed impatience even with logic. George was himself aware of this and recognized the possibility that the political economics of *Progress and Poverty* would not find ready acceptance and he clearly showed his lack of optimism when he wrote:

The truth that I have tried to make clear will not find easy acceptance. If that could be, it would have been accepted long ago. . . .

Will it at length prevail? Ultimately, yes. But in our own times, or in times of which any memory of us remains, who shall say?⁴

If Henry George exposed to view the truth of political economics in 1879, we should expect that at least ninety years later it would be generally accepted. Particularly we should expect this acceptance by a society supposedly dedicated in all things to truth and justice. Since such is not the case it must be concluded that either Henry George did not discover the truth he thought he had or else the arguments and those forces that are able to keep that truth obscured have been powerful indeed!

I

The Philosophy of *Progress and Poverty*

THE MAJOR THESIS of *Progress and Poverty* begins in the introduction with Henry George's paradox which he had already presented in articles, editorials and speeches:

This association of poverty with progress is the great enigma of our times. It is the central fact from which spring industrial, social, and political difficulties that perplex the world, and with which statesmanship and philan-

The Real Right of Man, William Ogilvie in *Essay on the Right of Property in Land* (1782), Thomas Paine in *Agrarian Justice* (1797), Patrick Dove in the *Theory of Human Progression* (1850), and some land reformers in America from 1840 to 1860.

⁴ Henry George, *Progress and Poverty* (New York: The Schalkenbach Foundation, 1929), p. 556.

thropy and education grapple in vain . . . not to answer is to be destroyed. So long as all the increased wealth which modern progress brings goes to build up great fortunes, to increase luxury and make sharper the contrast between the House of Have and the House of Want, progress is not real and cannot be permanent. The reaction must come.⁵

The study of political economics has failed to yield the answer to the problem of man's failure to deal justly with one another. This problem leads to poverty, depressions, and insecurity. And political economics has failed to resolve the problem because it is based on a series of dogmas rather than on scientific findings. George presents his first principles as scientifically deductible and empirically observable truths of the highest sanction (natural law), fundamental and recognizable to all.⁶

The economic structure of the book is largely based on the much-used Benthamite pleasure-pain doctrine; ". . . the law that is to political economy what the law of gravitation is to physics—that men seek to gratify their desires with the least exertion."⁷ The reform reasoning has its basis in George's own religious, moral and democratic ideas which, because he is a reformer as well as an economist, creates a serious conflict between his two principles concerning the nature of man.⁸ It is here that Henry George meets and, in the final analysis, refuses to accept an either/or position where freedom and equality are concerned, but instead proposes his own resolution of the antithesis. It is also here that George may be placed in juxtaposition with Thomas Jefferson who, in affirming the best government to be that which governs least, proclaimed himself an individualist and accepted the economic theory of *laissez faire*. But George also held that the welfare of the whole is the proper purpose of the State with government authority curtailing the activities of the individual for the common good. Jefferson had no solution to the antithesis, but believed that a people "enlightened" by education could be entrusted with the full powers of democracy.⁹

The arrangement of *Progress and Poverty* accommodates this duality in two separable chains of thought which are interdependent. Charles Albrow Barker labels these two sides of George's argument his "economic syllogism" and "moral sequence" each of which is divisible into three parts. The economic syllogism consists of these propositions: (1) that rent—an increment of monopoly not earned by individuals—always and

⁵ *Ibid.*, p. 10.

⁶ *Ibid.*, p. 11-12.

⁷ *Ibid.*, p. 204.

⁸ Charles Albrow Barker, *Henry George* (New York: Oxford University Press, 1955), p. 268.

⁹ Max Beloff, *Thomas Jefferson and American Democracy* (London: Macmillan & Co., Ltd., 1949), p. 255.

everywhere opposes and reduces wages and interest, the returns which the economy makes for labor's toil and for capital's postponement of consumption and investment risks. Labor, with or without the assistance of capital, combines with land—including site and resources, but excluding improvements—to create wealth; and capital is that portion of man-made wealth returned to production to procure more wealth. The benefit of site or natural resources conveys an advantage monopolistic by definition to one producer above another and should be understood as rent rather than as wage. And, as George asserted, "Increase in land values does not represent increase in the common wealth, for what land owners gain by higher prices, the tenants or purchasers who must pay them will lose."¹⁰ (2) The forces of the industrial economy operate observably to enlarge the take of land ownership, and that creates unbalance, poverty, and depression. (3) It is thus necessary to do away with private property in land, but George suggested the preferable alternative of taking by taxation the economic rent of land for the public benefit.

Finally, *Progress and Poverty* depends upon a moral sequence which Henry George put forth as follows: (1) the first premise is the plain fact of social injustice; (2) the second premise is theory and democratic idea (association in equality is the law of progress with equal opportunity for all men being the universal moral law);¹¹ (3) the antithesis between social fact and social theory is the tragic contradiction. (He is not sure that mankind will solve the question of poverty, progress, equality and individual life, but is sure only that we must try).¹²

George largely rejected prevailing economic theory, but he accepted David Ricardo's law of rent¹³ to which he added the theory of marginalism. He also included urban-site values along with natural resources as creating different land values. In his rejection of the theory that wages are paid from capital George quoted Adam Smith to the effect that:

The produce of labor constitutes the natural recompense or wages of labor. In that original state of things which precedes both the appropriation of land and the accumulation of stock, the whole produce of labor belongs to the laborer. He has neither landlord nor master to share with him.¹⁴

Although he approved of interest as a proper return to capital, George's commitment to labor is clearly shown in the above quotation. George may be classed as a capitalist in economic philosophy, but he devoted one chapter of his book to the problem "Of Spurious Capital and of Profits

¹⁰ George, *op. cit.*, p. 40, n. 3.

¹¹ *Ibid.*, p. 475-526.

¹² *Ibid.*, p. 268-71, n. 7.

¹³ *Ibid.*, p. 169, n. 3.

¹⁴ *Ibid.*, p. 51.

Often Mistaken for Interest.”¹⁵ Here he expressed his dislike of private monopoly or monopoly gains of whatever kind. He compared the tactics of the monopolists to those of highwaymen. Monopolies created by technology, such as the telegraph and railroads, George held should be owned and operated by the government.

In the last section of *Progress and Poverty*, George returned to his central problem and the reason as he saw it that civilizations flourish only to decline. The reason is that

. . . as a social development goes on, inequality tends to establish itself. . . . The unequal distribution of the power and wealth gained by the integration of men in society tends to check, and finally to counterbalance, the force by which improvements are made and society advances.¹⁶

This then completes Henry George's analysis and system of political economics: the problem which his solution attacked was the ever-increasing centralization of wealth which he found was caused by the private ownership of land (and other monopolies) from which flowed an unearned increment destroying the equality and freedom necessary to continued progress. The solution proposed was the expropriation for public benefit of the unearned increment of land (unimproved value) and its natural resources. His proposal became popularly known as the "Single Tax" which meant obtaining tax revenue from a levy on the value of land and other natural resources and abolishing all other taxes.

The so-called single tax movement found many loyal followers in America and England. More copies of *Progress and Poverty* have been circulated—several million—than perhaps of any other economic work, and sales of his many other books and articles on economics have also been substantial.¹⁷ Actually, Henry George's taxing proposal, which he first set forth as editor of a San Francisco newspaper in 1873, was that, "There should be three taxes . . . (1) a tax on the value of land, not counting improvements, above a minimum exemption; (2) a tax on the estates of deceased persons and; (3) license taxes on such businesses as require regulation, liquor and gambling houses for instance."¹⁸

II

The Politics of Economics

HENRY GEORGE ENCOUNTERED RESISTANCE to his economic philosophy on all fronts following the publication of *Progress and Poverty*. The

¹⁵ *Ibid.*, p. 189.

¹⁶ *Ibid.*, p. 517-19.

¹⁷ Edwin R. A. Seligman and Alvin Johnson, eds., *Encyclopedia of the Social Sciences* (London: Macmillan & Co., Ltd., 1937), Vol. VII, p. 65.

¹⁸ Barker, *op. cit.*, p. 184, n. 7.

socialists rejected the philosophy of land value taxation since they believed capital to be the locus of economic privilege. They saw land ownership as being only one form of capital exploitation. George's individualism also reacted strongly against the collectivism of socialism. George insisted that the economy functioned automatically through individual activity in free competition and this worked for the benefit of both the individual and the society. Legitimate *laissez faire* for Henry George would include freedom, equality and real competition which could not be had until private land ownership and other forms of monopolization and privilege grounded in social custom had been eliminated.

Laissez faire capitalists have not supported George because like the socialists they view land as merely a form of capital. Private property, including private ownership of land, is fundamental to their philosophy. The proposal to remove the benefit of private ownership of land through taxation is, as they see it, abhorrent. They generally, although mistakenly, classify George as merely "another socialist."

Among university professors, Henry George's economic philosophy has found active support from only a few, principally from John Dewey of Columbia and Harry Gunnison Brown of the University of Missouri. Economics professors have either largely ignored the writing of Henry George or accepted the work of his two principal antagonists. Edwin R. A. Seligman of Columbia and Francis A. Walker of Massachusetts Institute of Technology. The lack of interest in his work by university professors surprised George as his friend Louis F. Post indicates in his biographical work: "To his amazement economics professors ignored his demonstrations. They went on with their economic bubbling and boiling. . . ."¹⁹

Generally, the arguments against the proposal of land value taxation have been as follows: (1) the Ricardian theory, worked out to its logical conclusion, reveals that there are as many kinds of rents as there are different situations in the economy of a society; (2) land is no longer acquired by mere occupation, but rather by purchase, and thus to deprive these owners of advantages acquired by their labor is unjust; (3) economic rent may not be so accurately measured that only it would be appropriated; (4) land value taxation disregards the principle of ability to pay. (5) the confiscation of the "unearned increment" by appropriation of the economic rent should be reimbursed by a payment of the "unearned decrement" which the land may suffer.²⁰

¹⁹ Louis F. Post, *The Prophet of San Francisco* (New York: Vanguard Press, 1930), p. 317.

²⁰ Charles Gide and Charles Rist, (R. Richards, trans.), *A History of Economic Doctrines* (London: G. G. Harrap & Co., 1915), p. 548-53.

Most economists regard the critical point in the land value tax, as far as its impact is concerned, as being the nature of rent. The main point of this argument is that rent is a residual accruing to the owner of a scarce good after the *market* rates for his other factors, including wages and interest, are deducted. Land is asserted to be the only one example of a scarce good. The residual is determined by the market price for the good being produced with the aid of the scarce factor and may be either positive or negative.²¹

The obvious answer to this objection is that land is the *only* item that is present and necessary to the production of all goods and services. Indeed, the earth is the cradle of man and, although he can not remain in the cradle forever, it is still necessary even to his very existence. Essentially, this is the reply offered by John Stuart Mill in showing that none of the other rents has either the persistence or the generality of the rent of land. Economists Charles Gide and Charles Rist believed that this reply was sufficient to justify at least a partial application of the land value tax program despite the other asserted objections.²²

Finally, in a free market society economic reward supposedly goes to those who supply some needed good or service to society through their own productive effort. Capital is similarly entitled to an economic return since it represents a saving of one's productive effort to facilitate future production. Land, however, cannot be considered as merely another form of capital since, whatever its advantages may be, they are not due to any effort of the owner. This remains true even though the land is purchased by a second owner at a price determined by capitalization of the anticipated income from the land. Society and those who pay to use the bare land gain nothing from a mere change of ownership. Land, therefore, being the one item necessary to all production, becomes a distortive factor in the market which in a sense, though it may vary as to degree, is never positive, but always negative.

Fundamental to the land value tax is the fact that it cannot be shifted by the landowner to the user. This is not obviously clear without explanation. But it has never been seriously disputed. It was first recognized by the French Physiocrats in the middle of the 18th century; they favored a land value tax for this reason. Professor Paul A. Samuelson illustrates this in the most recent edition of his economics textbook with the comment that this is true where the owners hold a factor such as land

²¹ See generally, Alfred Marshall, *Principles of Economics*, 8th ed., (London: Macmillan & Co., Ltd., 1920), Book IV, chaps. 2-3; Book V, chaps. 9-11; George J. Stigler, *The Theory of Price*, 3rd ed., (New York: Macmillan Co., 1966), chap. 15.

²² Gide and Rist, *op. cit.*, p. 569, n. 19.

which is in inelastic supply.²³

A particularly clear demonstration of the non-shiftable nature of the land value tax by using it in a comparison with a tax on sugar, 'a commodity with an elastic supply, was given by Louis F. Post nearly 40 years ago.²⁴ His reasoning is as follows: With regard to sugar, higher costs of production and delivery tend to reduce the market supply of sugar, and actually will reduce it unless the ultimate buyer pays the added cost. However, a tax on land, whether improved or not and regardless of its improvements, will have no tendency to reduce the supply of land. On the contrary, it will increase the supply! Why will it make land plentiful? In Post's own words:

Because a tax on sugar would increase the cost of producing sugar, but a tax on land could add nothing to the cost of producing land. Land is unproducible. But it would add to the cost of holding land out of use, which would increase the market supply.²⁵

Economics Professor Harry Gunnison Brown of the University of Missouri points out that the taxation of bare land values would eliminate the inequity of the present system which penalizes a man for building or painting a house or for planting a tree. In answer to the complaint that there is a confiscation of a vested right, he asserts that this is no more so than when the government decides to regulate a monopoly in which innocent persons in good faith have purchased stock. The government has given no promise that bare land values will not be subjected to either full or partial taxation.²⁶

In answer to the objections relative to the accurate assessment and collection of a land value tax, the experience with such taxation in other countries might be considered. It has been adopted in varying forms in Denmark, South Africa, New Zealand and Australia. Most recently adopted in South Melbourne by vote of the property owners, land value taxation is credited with raising the value of new building permits issued by 2.4 times the previous rate.²⁷ The tax has also been used in Pittsburgh and Scranton, Pennsylvania, but the results, though seemingly favorable, are not conclusive due to the limited form of the land value tax adopted by those communities. The limited experience does, however, show that the land value tax is an effective and equitable

²³ Paul A. Samuelson, *Economics*, 7th ed., (New York: McGraw-Hill Book Co., 1967), p. 535-38.

²⁴ Post, *op. cit.*, p. 34-6, n. 18.

²⁵ *Ibid.*, p. 36.

²⁶ Harry Gunnison Brown, "Should Bare-Land Values Be Taxed More Heavily," *Journal of Land Economics*, 4 (1928), pp. 375-90.

²⁷ Harry G. Brown and Elizabeth R. Brown, "Incentive Taxation in Australia," *American Journal of Economics & Sociology*, 26 (1967), p. 416.

Henry George based his theory of land value taxation upon the fundamental difference between land and capital. Such a tax would apply the unearned increment of land to the general use of the community while retaining the advantages that are inherent in private ownership of land. Holding land for speculation would become unprofitable, thus making land more available for productive enterprise. Or, as Professor Samuelson asserts in his textbook, the land value tax will lead to a more efficient use of land.²⁸ Further, income derived from socially beneficial productive effort could be partially relieved of the burdens of taxation which would reinforce the free market system by making a fairer distribution of the economic benefits generated by that system.

Henry George envisaged all of these benefits and more in *Progress and Poverty*. This is an incomplete list and only a partial presentation of the economic philosophy of his book, but even this should have been sufficient to bring a gradual adoption of the system of land value taxation by at least one legislature. As has been shown above, land value taxation is certainly fair and just and in conformity with the free market system of the United States. Why has its reception been so hostile?

As has already been noted, Henry George's political economics has been rarely accepted in any degree by economics professors,²⁹ has been rejected by socialists, and has been dismissed by nearly every capitalist. However, the insurmountable opposition to George's economic philosophy has not come from these sources alone, but also from Christian religious philosophy and thought on economics.

The direct challenge to Henry George's philosophy by Christian religious thought was led by Pope Leo XIII, who on the 15th of May, 1891, issued his well known *Encyclical Letter on the Condition of Labor* which censured the idea of the common ownership of land.³⁰ A strong possibility exists, that this encyclical, known as *Rerum Novarum*, although ostensibly a condemnation of socialism, was issued in response to Henry George's political economics. In reply to *Rerum Novarum*, George wrote his *Open Letter to Pope XIII*³¹ which he issued on September 11, 1891. In his reply, George wrote as follows:

Failing to see the order and symmetry of natural law, (socialism) fails to recognize God. . . . The whole tendency and spirit of (*Rerum Nova-*

²⁸ Samuelson, *op. cit.*, p. 538, n. 22.

²⁹ WILLIAM L. RAND BROWN, "HOW College Textbooks Treat Land Value Taxation," *American Journal of Economics & Sociology*, 20 (1961), pp. 147-67; Harry Gunnison Brown, "Academic Freedom and the Defense of Capitalism," *American Journal of Economics & Sociology*, 15 (1956), pp. 173-82.

³⁰ Henry George, *The Complete Works of Henry George* (Garden City, N.Y.: Doubleday, Page & Co., 1911), Vol. III, p. 574, n. 7.

³¹ *Ibid.*, p. 574, n. 7.

rum's) remedial suggestions lean unmistakably to socialism. . . . Your encyclical gives the gospel to labourers and the earth to the landlords.³²

The opposition of Pope Leo XIII does not seem to have so greatly surprised George as it did his followers. They undoubtedly had in mind the fact that George's political economics were after all based on natural law. However, George was thoroughly familiar with history, and though the encyclical did not mention his name, he at once recognized that it was his economic and social philosophy that had been particularly singled out for attack. His son was later able to obtain an indirect verification that this was true.³³

In order to understand the church's opposition to Henry George, it is necessary to examine the church's historical and present economic position. Briefly, the medieval church assumed that, (1) economic interests were subordinate to the real business of life, which was salvation, and (2) economic conduct was but one aspect of personal conduct, upon which the rules of morality were fully binding. Generally, economic motives were suspected and there was no place for economic motives not related to a moral end. Interest on a loan of capital was unlawful and private property was permitted only because men worked more and disputed less when property was private. Private property was tolerated as a concession to human frailty, the ideal, if only man could rise to it, being communism.³⁴

In the history of the Catholic Church, private property in land has always existed in one form or another with the church itself being a substantial landholder. Although the position of the church has since changed, the passage of *Progress and Poverty* which it is likely most provoked Pope Leo XIII is this:

There is a delusion resulting from the tendency to confound the accidental with the essential—a delusion which the law writers have done their best to extend, and political economists generally have acquiesced in, rather than endeavored to expose—that private property in land is necessary to the proper use of land, and that to make land common property would be to destroy civilization and revert to barbarism.³⁵

Progress and Poverty affirmed the rightfulness of private ownership of personal property so long as it was not monopolistic in character, but rejected, because of its monopolistic character, the position of the church concerning private land ownership. The Christian churches have retreated from this position, but today, as was first recognizable in the encyclical of

³² *Ibid.*

³³ *Ibid.*, p. 573-75.

³⁴ R. H. Tawney, *Religion and the Rise of Capitalism* (New York: Harcourt, Brace and Co., 1926), p. 31-2.

³⁵ George, *op. cit.*, p. 397, n. 3.

Pope Leo XIII: "For the Christian the problem of property is essentially the problem of effecting a just distribution of the world's goods."³⁶ George would reach this goal by means of a largely automatic free market system constructed to conform with the principles of natural economics. The distortive forces of monopoly would be controlled by the government through taxation and other means. But such a system as George envisioned did not meet with church approval, and as George to his horror realized, the Catholic Church was embarking upon a system of socialism to achieve the economic goal of "a just distribution of the world's goods."

Some Christian church leaders now advocate land reform and taxation as a possible means to achieve a more equitable distribution of the world's goods.³⁷ However, this for the Christian churches is only a part of a socialized economic system and actually today the Catholic Church has indicated that it is ready to make peace with the Communists and their State socialist system.

What Christianity seeks is a sort of return to the organic society with "human dignity" once again the basic value³⁸ and with itself and the wealthy establishment in firm control of government which is able to coerce and regulate the new industrial State.³⁹ In exchange for its assistance, this establishment group shares power and is allowed to retain its positions of monopoly and special advantage.

The difficulty is that the fundamental weakness of the old economic organization is still present. As the socialized economy is implemented, the ordinary individual is made dependent for his needs upon increasingly

³⁶ Frank Grace, *The Concept of Property in Modern Christian Thought* (Urbana, Illinois: University of Illinois Press, 1953), p. 93.

³⁷ See, L. G. Ligutti, "What Can Religious Leaders Do to Advance the Cause of Economic and Social Progress Through Land Reform, Land Tenure, Land Taxation, etc.?" in James R. Brown and Sein Lin, eds., *Land Reform in Developing Countries*, (West Hartford, Conn.: John C. Lincoln Institute, University of Hartford, 1968).

³⁸ The development of a legal system also based upon the slippery value of "human dignity" to match the socialist political economic system of Christianity may be found in the writings of Professor Myres McDougal. See, McDougal, Lasswell, and Reisman, "Theories About International Law: Prologue to a Configurative Jurisprudence," 8 *Virginia Journal of International Law* 188 (1968); Lasswell and McDougal, "Jurisprudence in Policy-Oriented Perspective," 19 *Florida Law Review* 486 (1967); McDougal, "Jurisprudence for a Free Society," 1 *Georgia Laws Review* (1966); Lasswell and McDougal, "Legal Education and Public Policy: Professional Training in the Public Interest," 52 *Yale Law Journal* 203 (1943).

³⁹ See, John Kenneth Galbraith, *The New Industrial State* (Boston: Houghton Mifflin Company 1967), p. 101. Professor Galbraith has shown that much to the distress of socialists the nationalization of industry is no more effective of public control than government regulation. He notes that "Socialism has come to mean government by socialists who have learned that socialism, as anciently understood, is impractical." Thus, no real change in the workings of the industrial organization are effected and the economic distortions of the old system are only further distorted by the new system of distribution. Henry George would question whether this might not lead to greater inefficiency and ultimately deeper poverty.

centralized authority. Predictably, this again would lead to a hopelessness of life for the great mass similar to the old organic middle ages. The reason for this is that the mass *is* the great mass with no opportunity for individual assertion. In a socialistic economy, respect for the individual is obliterated in the attempt to meet the demands of the mass.⁴⁰

Although the socialist economy is not yet fully operative in the United States, this hopelessness of life is already apparent with its consequent breakdown of law and order and, eventually, as Henry George predicted, it will bring about the destruction of our society. It is now realized that the heart of our perplexing problem is individuality. Henry George recognized this nearly a century ago when, in the final chapter of *Progress and Poverty* he asserted that the great, ultimate problem of human existence was that of the individual identity in society:

The problems we have been considering lead into a problem higher and deeper still. Behind the problems of social life lies the problem of individual life. I have found it impossible to think of one without thinking of the other. . . .⁴¹

Although the political economic philosophy of socialism has dominated recent political economic thought, Henry George's individualistic economic philosophy has had a great effect in the intangible realm of opinion as expressed in the writings and words of the exponents of ideas. This sort of influence is difficult to trace but that it does exist there is no doubt and shows that *Progress and Poverty* was, and still is, a living inspiration. Contributing to the difficulty of tracing George's influence is also the fact noted by George R. Geiger in his book that: "Henry George must be considered as part of a great liberal tradition, a tradition that extends far in the past and includes in its ranks many great names."⁴²

Anna George de Mille⁴³ and others⁴⁴ show that the Progressive movement and the programs of Woodrow Wilson owed much to Henry George's writings. Charles Albro Barker found that, "The presidential election of 1912 had assimilated political Georgism in the larger progressive movement."⁴⁵

⁴⁰ Dean M. Lumsden, *James J. Livingston of Recent Christian Religious Thought for Business Administration: Theosophy and Reaction* (Laramie Wyoming: Department of Business Administration, University of Wyoming, 1907), unpublished thesis.

⁴¹ George, *op. cit.*, p. 555, n. 3.

⁴² George R. Geiger, *The Philosophy of Henry George* (New York, New York: The Macmillan Company, 1933), p. 384.

⁴³ Anna George de Mille, *Henry George, Citizen of the World* (Chapel Hill, N.C.: University of North Carolina Press, 1950), p. 3.

⁴⁴ Edward M. Hugh Jones, *Woodrow Wilson and American Liberalism* (New York: Macmillan Company, 1949), p. 66-67.

⁴⁵ Barker, *op. cit.*, p. 634, n. 7.

Barker believes that George's influence would have been greater had he proposed multi-form remedies for the problem of *Progress and Poverty* instead of so completely committing himself to land value taxation.⁴⁶ It could be that those who have read his work and followed his thought have done just that, making it unnecessary for George to do so himself.

III

Property Taxation Today

BETWEEN 1897 AND 1920, single taxers made repeated efforts in Washington, Oregon and California to get state constitutional amendments adopted which accepted the theory of progressive taxation or provided for local option in the taxation of property. All of these proposed amendments were defeated by the voters. In 1912, a constitutional amendment was proposed in Missouri which provided for the gradual exemption from taxation of personal property and improvements with the proviso that land should never be exempt from taxation. The campaign of 1912 was perhaps the most bitter of all land value tax battles and the amendment was overwhelmingly defeated. The most promising campaign of the American movement has been the 1913 passage of the Stein Bill in Pennsylvania, which created the so-called "Pittsburgh Plan," under which the total of all improvement values bear one-third of city expenses, and the total of all land values two-thirds.⁴⁷ One final tax battle was fought in California in November 1938, when the citizens of that state rejected for the seventh time a proposal to revise the state tax system in the direction of a land value tax. Even including sales tax repeal in the initiative measure did not suffice to overcome the well-financed opposition.⁴⁸

Recently there has been renewed interest in the property tax and the publication of several books on the subject⁴⁹—including the already widely noted study by Dick Netzer, *Economics of the Property Tax*⁵⁰—will almost certainly bring new attention to this long neglected area of taxation. The work of Netzer is a limited consideration of property taxation in the United States, its sources, economic effects and alternative forms to those presently used for property taxation.

⁴⁶ *Ibid.*, p. 298.

⁴⁷ *Ibid.*, pp. 424-46, n. 41.

⁴⁸ Robert B. Pettengill, "Recent Changes in the Single Tax: In Light of the California Plan of 1938," *THE SINGLE TAXER*, LV (1939), p. 74.

⁴⁹ Arthur D. Lynn, Jr., ed., *The Property Tax and Its Administration* (Madison, Milwaukee, and London: University of Wisconsin Press, 1969); Richard W. Lindholm, ed., *Property Taxation USA* (Madison, Milwaukee, and London: University of Wisconsin Press, 1967).

⁵⁰ Dick Netzer, *Economics of the Property Tax* (Washington, D.C.: Brookings Institute, 1966).

Netzer finds that the property tax is an important source of state-local revenues and that these revenues are about the same fraction of gross national product as in the early years of the century.⁵¹ The author shows that there is an element of regressivity in property taxes. The most reasonable explanation for this regressivity is that "... expenditures on housing exhibit a relatively low order of income elasticity in the sense that, at any time, richer families spend less proportionately for housing than poorer families."⁵²

In his examination of land value taxation, Netzer concludes that such a tax would encourage building and rehabilitation and reduce land prices. Such results would produce positive effects on urban redevelopment.⁵³ In his conclusion, Netzer says that, "There is a strong economic argument for taxing location rents via the site value tax. . . . There is also a good case for supplemental gains taxation of land value increments."⁵⁴

The fact that the land value tax movement has failed to make much progress is beyond question, but the theory of land value taxation and its use as an instrument for both fiscal and social good make it an attractive replacement for other tax schemes now in effect. Its utilitarian benefits of preventing speculation, encouraging building, decreasing the cost of land and transferring the tax burden to the speculative owner who holds his land vacant make it a policy of important potential use in city planning.⁵⁵ Developing areas would be particularly well advised to confine property taxation to land value.

With regard to the land value taxation of mineral resources and forest lands, the taxing proposals of Henry George were criticized because taxation by his method would tend to encourage rapid exploitation contrary to the principles of conservation.⁵⁶ However, the proponents of mineral taxation found in the severance tax a plan that promotes conservation and at the same time is in conformity with the economic principles of Henry George. In the case of mineral resources, economic rent is obtained in the removal of the mineral from nature's storehouse. Therefore, a tax on the privilege of removing the mineral has the effect of expropriating the economic value of the mineral land. Since the tax is only applicable if minerals are in fact removed, this type of taxation has a definite conserving

⁵¹ *Ibid.*, p. 8.

⁵² *Ibid.*, p. 57.

⁵³ *Ibid.*, p. 204-8.

⁵⁴ *Ibid.*, p. 217.

⁵⁵ Leon Silverman, "Municipal Real Estate Taxation as an Instrument For Community Planning," 57 *Yale Law Journal*, 1947, p. 219.

⁵⁶ Richard T. Ely, "Land Economics," in Jacob H. Hollander, ed., *Economic Essays*, (New York: Macmillan Company 1927), p. 119-35.

aspect. Such a tax may either be placed on the quantity of the minerals removed or upon the value of the minerals removed. An exemption is normally given to marginal producing sources. So long as the tax is not excessive, it may be beneficial to consumers by tending to even out the mineral production flow to the market. This is particularly true where the tax is based on the quantity of production rather than the value of production.⁵⁷

In Louisiana, those who first advocated taxing the severance of natural resources, such as oil and gas, used the argument that these resources belonged to the state, and therefore to the people of the state. Adequate taxation covering such severance had to be levied to secure a part of the severed wealth for the benefit of the future of the state.⁵⁸ Further, severance taxation of a producing natural resource is undoubtedly the most equitable and practical method of tax assessment.⁵⁹ Of course, if the land has a value separate from natural resource production, that too can be assessed for taxation.

State severance taxes have never removed a large percentage of the economic rent from mineral or forest lands, but have provided substantial tax revenues to several states including Louisiana. Such taxing statutes represent one of the victories of Henry George's philosophy.

IV

Conclusion

NEARLY ALL THOSE who have examined the life and work of Henry George have advanced the opinion that his influence would have been greater if he had proposed more remedies for "the problem" than merely land value taxation. If he had joined the conservation movement for instance, it has been suggested that he would have succeeded in greater accomplishments. If he had joined in the "trust busting" movement, then he would certainly have achieved much more than he in fact did. Others try to show what George would propose if he were writing today.⁶⁰

Actually, Henry George did propose more than a single tax, as already noted, and his opposition to monopoly was not limited to that of the land-

⁵⁷ Lewis C. Gray, "Rent Under the Assumption of Exhaustibility," *Quarterly Journal of Economics*, 28 (1914), p. 466-89.

⁵⁸ Leslie Moses, "The Growth of Severance Taxation in Louisiana and Its Relation to the Oil and Gas Industry," *17 Tulane Law Review*, 1943, p. 602.

⁵⁹ See, Anthony G. Ferraro, "Valuation of Property Interests for Ad Valorem Taxation of Extractive Industry and Agricultural Realty: Problems and Solutions," in *The Property Tax and Its Administration*, Arthur D. Lynn, Jr. ed. (Madison, Milwaukee, and London: University of Wisconsin Press, 1969), p. 125.

⁶⁰ Harold S. Buttenheim, "If Henry George Were Writing Today," *Land Economics*, 11 (1935), p. 1.

owner. However, George wanted to focus attention on what was for him just one

. . . simple truth: That as land is necessary to the exertion of labor in the production of wealth, to command the land which is necessary to labor, is to command all the fruits of labor save enough to enable labor to exist. . . .

There are pictures which, though looked at again and again, present only a confused labyrinth of lines or scroll work—a landscape, trees, or something of the kind—until once the attention is called to the fact that these things make up a face or a figure. This relation once recognized, is always afterward clear. It is so in this case.⁶¹

Henry George wanted to be sure that the reader of *Progress and Poverty* saw the face or figure in the picture. In this he succeeded, but what the critics are saying is that in doing so George lost sight of the landscape in the picture. However, Henry George wrote one of those rare coincidences of language, a book that lives and is as relevant today as the day in which it was written. George was successful in his effort by his own estimation, and it remains for those who go with him in thought to make the multi-form applications of his political economic philosophy. This was, after all, what George intended. We can only hope, however, that the applications of his political economics will not be too few and too late for the preservation of our country.

Denver, Colo. 80231

⁶¹ George, *op. cit.*, p. 294–95, n. 3.

Children in Developing Nations

MORE THAN THREE-FOURTHS of the world's 1.2 billion children live in the developing nations. Half of them do not receive any formal education. Over 50 per cent of the teachers in the schools have no professional training.

Three out of four of these children live in areas where mortality rates among one to four-year-olds are about 40 times higher than in the developed countries. About 60 per cent of those who survive suffer from malnutrition. The while 20 per cent of them must drink is either unsafe or inadequate.

UNICEF assists educational and nutritional programs in Asia, Africa, Latin America and the Middle East. Providing safe water is another of its goals. But only the abolition of land monopoly will make possible the abolition of hunger.

The Impact of Henry George on British Economists, II

*The Second Phase of Response, 1883-84; Marshall, Toynbee and Rae**

By BERNARD NEWTON

V

The Peak of Inquiry

THE SECOND PHASE of interest among the British economists in Henry George, during 1883 and 1884, was characterized by an intense discussion of both the man and his work in personal conversations, private letters, public speeches and in published writings. As for the publicly printed analyses, the highlight of popular interest was in two public lectures delivered by Arnold Toynbee, historian and reformer, in January, 1883, shortly before his premature death.⁴⁰ Alfred Marshall, not quite yet the pre-eminent British economist, followed in Toynbee's wake, and delivered three public lectures on George during the following two months.⁴¹ The blind Cambridge professor, Henry Fawcett, who was distinguished both as an economist and as a member of Parliament, discussed the land nationalization scheme of *Progress and Poverty* in the revised edition of his then widely used text.⁴² Francis D. Longe, who initiated the British series of successful attacks on the wages fund theory that extended from the mid-1860s through the 1870s, wrote a pamphlet in which he intensely analysed the economic theory of *Progress and Poverty*.⁴³ John Rae, journalist and author of *Life of Adam Smith*, included an exhaustive chapter on George in his *Contemporary Socialism*, noting that George was being included in his book even though he was not a socialist,

* For the first phase of response (1879-82) see my paper, "The Impact of Henry George on British Economists," *Am. J. Econ. Sociol.*, 30 (April 1971).

⁴⁰ "Progress and Poverty, a Criticism of Mr. Henry George" (*Lectures*), pp. 267-319.

⁴¹ "Wealth and Want" (New York Public Library). (The New York Public Library has bound the photostated copies of reports of Marshall's three lectures, taken from two different British newspapers published during 1883, and it has given these lectures the title "Wealth and Want.")

⁴² *Manual of Political Economy*, 6th ed (London: Macmillan 1881). In July of 1883, the chapter on Henry George and of the British land reformer, Alfred Russel Wallace, was published intact as a magazine article. See "State Socialism and the Nationalization of the Land," *Macmillan's*, 48 (July, 1883) pp. 182-94.

⁴³ *A Critical Examination of Mr. George's Progress and Poverty* (London: Simpkin and Marshall, 1883).

because his doctrines are in many respects closely allied with those of socialism, and because he has done more than any other single person to stir and deepen in this country an agitation which, if not socialist, at least promises to be a mother of socialism.⁴⁴

Professor Joseph Shield Nicholson of the University of Edinburgh centered a discussion of "The Nationalisation of Land" on Henry George's scheme to absorb economic rents by taxation.⁴⁵ James E. Thorold Rogers assailed George because

a clever man had caught up a few real facts and a few doubtful theories, and had constructed from them a sketch of social life, which was characterized by growing evil and waning hope.⁴⁶

In Ireland, the ethically oriented Charles S. Devas asserted that for the fame which cannot be suppressed, and the sale which cannot be restrained, of Mr. George's work on *Progress and Poverty*, shew (sic) the day is over when we could meet the Socialists with silence, or ridicule, or vituperation.^{47, 48}

Toynbee's two lectures, which were patterned on the very last two lectures that he had given as an Oxford teacher, were presented to an audience containing a large contingent of workers.⁴⁹ The first lecture was devoted primarily to the relationship between George's wage theory and the conditions of California and the new world; while the second lecture is devoted both to the applicability of George's wage theory to England and the old world, and to Toynbee's reform ideas. Treated as a unit, the lectures have two fundamental aspects. First, they contain an analysis of some of the fallacies and inconsistencies in George's wage theories. Sec-

⁴⁴ New York: Charles Scribner's Sons, 1884, p. vi.

⁴⁵ *Tenant's Gain Not Landlord's Loss* (Edinburgh: David Douglas, 1883), ch. 7.

⁴⁶ *Six Century of Work and Wages*, pp. 531-32.

⁴⁷ *Groundwork of Economics* (London: Longmans, Green, 1883), p. vi.

⁴⁸ Further manifestations of the interest of British economists in George during this period can be seen from the following examples: George received letters from the following British economists during this period: Philip Wicksteed (February 4, 1883 and April 21, 1883); John L. Shadwell (January 5, 1883); and J. E. Symes (November 22, 1883). See Henry George Collection, New York Public Library. Then, too, The Weekly Times (February 1, 1884) reported that Thorold Rogers of the Cobden Club feared "that the Georgian economists are finding their way into high quarters." This quotation is taken from *Transactions*, pp. 111, p. 191. Also, it is noteworthy that *Progress and Poverty* was used as one of the texts in the course at the City of London College during this time, and that one of the courses listed in the *Official Programme* for 1883-1884 was "Definition of Political Economy, its history and the new theories of Henry George and others . . . on the nationalisation of land, etc." *Ibid.*, p. 69. Finally, Millicent G. Fawcett, the wife of Henry Fawcett, in her *Political Economy for Beginners*, 6th ed. (Cambridge: University Press, 1884) made changes in her text; "the principal among the latter are references to the theories propounded by Mr. Henry George in *Progress and Poverty*, and to recent experiments in England and the continent . . ." (Preface).

⁴⁹ Barker, *Henry George*, pp. 390-91.

ond, they present Toynbee's own scheme of reform. The lectures were delivered extemporaneously,⁵⁰ and they appear to be unclear at many specific points. Nevertheless, Toynbee's basic economic skill and his intense reforming zeal are persistently manifest.

VI

The Toynbee-Marshall Lectures

TOYNBEE GAVE GEORGE serious and respectful treatment. He expressed full appreciation for George's "warm and fierce sympathy" for human suffering,⁵¹ and he deemed *Progress and Poverty* "remarkable" and somewhat original.⁵² Like other writers, both before and after him, Toynbee saw George "as a child of the peculiar circumstances" of California, in which poverty existed even though the population-land ratio was low, but where there were large concentrations of speculative land ownership.⁵³ The Englishman agreed with the American that the most fundamental economic issue facing society was the relationship between the distribution of wealth and the increasing economic development.⁵⁴ However, Toynbee believed that *Progress and Poverty* was "fundamentally dangerous" because, despite the fact that it contained partial truths, it contained serious errors and proposed a "delusive panacea."⁵⁵

One of the principal points in Toynbee's analysis was that both money and real wages appear to have risen in America⁵⁶ and in England.⁵⁷ However, the Oxford scholar accepted the argument that wages had not risen as rapidly as the growth in wealth would warrant. But he insisted that rent alone did not swallow up this entire increase in wealth, for it has been shared with profits and wages.⁵⁸ Taking a position similar to that of Laveleye before him, Toynbee asserted that the main cause of the inadequate share of labor did not rest in the private ownership of land, as George maintained, but rather in the existence of large employers and huge capitalists who can practically dictate terms to the workers.⁵⁹ Instead of land nationalization, the English reformer suggested the establishment of unions and producer cooperatives among his many reform proposals.⁶⁰

⁵⁰ Barker, *op. cit.*, p. 391.

⁵¹ Toynbee, *op. cit.*, p. 267.

⁵² *Ibid.*, p. 270.

⁵³ *Ibid.*, pp. 270-71.

⁵⁴ *Ibid.*, pp. 272-73.

⁵⁵ *Ibid.*, p. 270.

⁵⁶ *Ibid.*, pp. 301, 304.

⁵⁷ *Ibid.*, pp. 301, 304.

⁵⁸ *Ibid.*, pp. 279-81.

⁵⁹ *Ibid.*, p. 285.

⁶⁰ *Ibid.*, p. 306.

Philip Wicksteed wrote to George about Toynbee's lectures, wryly commenting that they were a great success, since they cleared out the publisher's entire stock of *Progress and Poverty*.⁶¹

Alfred Marshall's public lectures were more strongly critical of George than that of Toynbee. In his introductory remarks he announced that George "is by nature a poet, not a scientific thinker," and that the "real value" of his writing lies "in the freshness and earnestness of his views of life."⁶² Although Marshall did not directly refer to George as a socialist, he seems to associate George with socialist thinking.⁶³ Since the lectures were public, Marshall was restricted in the amount of technical economic analysis that he could present.

The lectures can be said to contain three principal analytical aspects. The first aspect is concerned with invalidating George's distributional theory by means of both statistical and theoretical analysis. Thus, for example, Marshall endeavored to disprove George's theory that greater wealth brings about greater poverty, by adducing statistical evidence to demonstrate that the average wages of workers had increased since the beginning of the 19th century, albeit too slowly.⁶⁴ As another example, Marshall attempted to demonstrate that George exaggerated the importance of rent in the distributional scheme, and he produced figures to show that rent is a relatively small part of the "total produce of industry" (a maximum of 75 millions of pounds out of an approximate total of 1,125 millions for England).⁶⁵ Furthermore, Marshall aimed to weaken the force of George's attacks upon the then current wage theory, and he averred that George's criticisms were not based upon the current theory, but upon the awkward phraseology of the previous generation of economists.⁶⁶ Then, too, he attacked George for developing a new general law that wages and interest are always jointly high, or jointly low, on the basis of the particular limited experience of America and England. Marshall maintained that it is quite possible for the proportions between labor and capital to be such that one factor may receive relatively high payments while the other may receive relatively low payments.⁶⁷

⁶¹ Philip H. Wicksteed to Henry George, February 4, 1883, HGC.

⁶² *Ibid.*, First Lecture, p. 1. (This lecture was presented at St. Philips Vestry Hall, Bristol University College, Bristol, England on February 19, 1883. The photostatic copy of the lecture is from *Times and Mirror*, February 20, 1883.)

⁶³ *Ibid.*

⁶⁴ *Ibid.*, First Lecture, pp. 2-4.

⁶⁵ *Ibid.*, Second Lecture, pp. 1-2. (This lecture was presented at St. Philips Vestry Hall, Bristol University College, Bristol, England, on February 26, 1883. The photostatic copy of the lecture is from *Western Daily Press*, February 27, 1883.)

⁶⁶ *Ibid.*, Second Lecture, p. 1.

⁶⁷ *Ibid.*, Second Lecture, p. 2.

The second principal analytical phase of the lectures is concerned with the most popular land reform schemes then extant in England. The plans of Alfred Russel Wallace, the great geologist and evolutionist, and Henry George received the most prominent attention.⁶⁸ Marshall held that George's scheme to appropriate "the net value of the inherent properties of the soil" does not alter the margin of cultivation. Therefore, "its only effect on wages, even on his own theory, would be by relieving capital and labour from the great part of the taxes imposed on them." Marshall adduced figures to show that this saving would be quite small. He then dramatically attacked George, because "for the sake of this . . . he is willing to convulse society and run the dangers of civil war; and he is willing to run the risk of driving away capital and business ability."⁶⁹

In the third main analytical aspect, Marshall presented his own conceptions both of the causes of and the cures for poverty in England and America. Marshall deemed the payment of rent a minor cause of poverty.⁷⁰ He affirmed the chief cause of poverty to be the lack of skills and moral strength of workers. He presented a number of suggestions—designed to eliminate poverty, but the principal basis for cure seems to lie in the education of worker's children; in teaching workers how to manage their "own affairs;"⁷¹ and in curtailing the size of the family through later marriages.⁷²

It is interesting to observe that Marshall and George had a personal confrontation during the question period of a lecture delivered by George at Oxford in 1884. George's speech was a simple, inspirational one that he suddenly cut short in order to answer questions.⁷³ George found himself subject to a certain amount of hostility from Marshall and others in the audience.

Marshall was the first to rise, and he noted that not a single economic doctrine in George's book was both new and true, since what was new was not true, and what was true was not new. He proclaimed that he had repeatedly challenged anyone to disprove this, but that no one had offered to do so. Marshall maintained that George had not understood a single economist that he had criticized in *Progress and Poverty*. Then, Marshall went on to state that he did not censure George for this because

⁶⁸ *Ibid.*, Third Lecture, pp. 5-6. (This lecture also was presented at St. Philips Vestry Hall, Bristol University College, Bristol, England, on March 6, 1883. The first static copy of the Lecture is from *Times and Mirror*, March 7, 1883).

⁶⁹ *Ibid.*, Third Lecture, p. 6.

⁷⁰ *Ibid.*, Second Lecture, p. 4.

⁷¹ *Ibid.*, Second Lecture, p. 5 and Third Lecture, pp. 7-8.

⁷² *Ibid.*, Third Lecture, p. 7.

⁷³ Barker, *op. cit.*, pp. 403-4.

he lacked the special economic training necessary to understand these writers. George's response was that the truth in his book could not be new, for it has always existed and always would. George also attempted to respond to a number of Marshall's questions.⁷⁴ Marshall rose often. The meeting became disorderly when Marshall asked why *Progress and Poverty* showed that workers could not improve their position by means of thrift, and George then unresponsively replied that he was not there to answer questions about *Progress and Poverty*, and that besides it was some time since he had read his own book. When Marshall asked him to prove that landlordism was responsible for poverty, George merely answered that poverty existed in the country.⁷⁵ Marshall also attacked the depression theory of *Progress and Poverty*.⁷⁶ At one point in the proceedings, Marshall announced that the speaker had failed to answer his questions.⁷⁷ While others had merely asked George questions, Marshall had been the only one to debate with George.⁷⁸

VII

Fawcett and Longe

ALTHOUGH HENRY FAWCETT had received a copy of *Progress and Poverty* from George, along with a personal letter in 1880,⁷⁹ he did not react with an article until 1883, when general interest was high. Unlike Arnold Toynbee and Alfred Marshall, Fawcett devoted scant attention to George's analytical framework. Fawcett was concerned with a number of different plans for "state socialism" which involve the "nationalisation of land and other instruments of production."⁸⁰ Because the proposals of Henry George secured the widest currency, Fawcett gave him more attention than he gave to any other reformer. The Englishman found George's proposals vague. He coupled George's scheme with that of Alfred Russel Wallace and, therefore, he assumed that George would wish the State to take possession of the lands. Fawcett noted that unlike Wal-

⁷⁴ Henry George, Jr., *The Life of Henry George* (New York: Doubleday, Doran & Co., 1930; reprint of the original—1900—edition), pp. 435-36.

⁷⁵ Lawrence, *Henry George in the British Isles*, p. 71.

⁷⁶ Barker, *op. cit.*, pp. 403-4.

⁷⁷ George, Jr., *op. cit.*, p. 434.

⁷⁸ In the *Proceedings*, "Henry George's Oxford Speech," *California Historical Society Quarterly*, 30 (June, 1931). Marshall's attitude toward George is seen from the records of Mrs. Mary Paley Marshall who wrote: "At that time Henry George's 'Progress and Poverty' roused much interest. Alfred gave three lectures on it at Bristol which Mill Elliot said reminded her of a boa constrictor which slobbers its victim before swallowing it." See John Maynard Keynes, *Essays in Biography* (new edition; New York: Horizon Press, 1951), p. 337.

⁷⁹ Lawrence, *Henry George in the British Isles*, p. 7.

⁸⁰ Fawcett, *op. cit.*, p. 279.

lace, George would give either no compensation or a very small compensation to the dispossessed landlords. Fawcett then asserted that, before George, no one made a proposal involving outright confiscation. "Nothing, in our opinion, can be more unjust than for the State to take possession of land without paying full market price to the owners."⁸¹ Fawcett agreed that reform was necessary, but that it should involve the abolition of restrictions on the private transfer of land, such as primogeniture and entail.⁸² Fawcett was correct in supposing that George had suggested nationalization, for George had written that "*we must make land common property*."⁸³ George claimed that the latter can be achieved "by at one stroke abolishing all private titles, declaring all land public property, and letting it out to the highest bidders in lots to suit, under such conditions as would sacredly guard the private right to improvements."⁸⁴ However, a reader of Fawcett would secure a partial and somewhat distorted view of George's approach, for the American reformer maintained that "it is not necessary to confiscate land; it is only necessary to confiscate rent"⁸⁵ by means of land taxation.^{86, 87}

Francis D. Longe, lawyer and self-taught economist, analyzed Henry George's "powerfully written"⁸⁸ *Progress and Poverty* with respect and intensive care. *In toto*, Longe differs significantly with George on the latter's reformulation of basic English classical concepts; on his analytical conclusions derived from his restatement of the English classical theory, and on his practical solution to the problem of poverty.

As for George's reconstruction of certain English classical concepts, Longe cannot accept George's thesis that labor employs capital rather than vice versa,⁸⁹ nor can Longe agree that an increase in population tends to bring a more than proportional increase in productivity, for he believes that the Malthusian population doctrine has partial validity.⁹⁰ However, the Englishman does note with approval that "George has thrown some

⁸¹ *Ibid.*, p. 280.

⁸² *Ibid.*, p. 287.

⁸³ George, *op. cit.*, p. 295.

⁸⁴ *Ibid.*, p. 362.

⁸⁵ *Ibid.*, p. 364.

⁸⁶ *Ibid.*

⁸⁷ Both the British press and the socialists had assumed that George favored direct land nationalization. Up until 1887, he did not disavow the term "land nationalization" as an appropriate label for his scheme, because he believed that taxation of land was essentially the same thing as nationalization. LITTLE, *Henry George in the British Isles*, p. 78. In the last until the end of 1888 that George promoted the term "single tax" in Great Britain. *Ibid.*, pp. 53, 57.

⁸⁸ *Op. cit.*, p. 3.

⁸⁹ *Ibid.*, pp. 21, 40.

⁹⁰ *Ibid.*, pp. 16-17.

useful light" in his attack on the wages fund theory.⁹¹ As for the American economist's analytical conclusions, Longe cannot accept George's determination that progress necessarily brings increasing rents to the landlords. In fact, as Longe discerns matters, the increases in productivity have related primarily to manufactures, railroads and shipbuilding, rather than to agriculture. He finds that the value of agricultural lands in England, reflecting changes in rents, have hardly risen, and may even fall in the future.⁹² In addition, he cannot accept George's thesis that increasing progress leads to a fall in the general level of wages. Like other of George's critics, Longe points out that George himself states that wages fall only relatively, and that they may remain constant or even rise absolutely.⁹³ Longe accepts the fact that poverty still exists, but only in the lowest ranks of labor, and because of the operation of the Malthusian population doctrine rather than from increases in rents.⁹⁴

Longe considers George's solution to the problem of poverty to be "the futile chimera of a theorist deluded by his own false generalizations."⁹⁵ Like other English economists, Longe finds that the revenue accruing from taxing the entire rent of land would be insufficient to meet the needs of government.⁹⁶ Furthermore, he believes that the taxation of the entire rent would adversely affect capital, which is the prime source of progress and of employment for labor.⁹⁷

As for George's entire theory, Longe, like other British economists, maintains that it is derived from the experience of the "incipient stages of progress exhibited in the Western States of America."⁹⁸ He agrees that George probably has a good basis for maintaining that speculation in the best lands by large speculators excludes the poor from the opportunity of securing a livelihood on the land. However, Longe asserts that the cause of this evil is not the rent payments, but the right of speculators to engross the lands.⁹⁹

VIII

Rae and Devas

JOHN RAE GAVE *Progress and Poverty* a closely organized and intensive

⁹¹ *Ibid.*, p. 59.

⁹² *Ibid.*, pp. 12-14.

⁹³ *Ibid.*, p. 10.

⁹⁴ *Ibid.*, pp. 16-18.

⁹⁵ *Ibid.*, p. 28.

⁹⁶ *Ibid.*, pp. 29-31.

⁹⁷ *Ibid.*, pp. 32-33.

⁹⁸ *Ibid.*, pp. 5, 29, 33-36. The quotation is from page 5.

⁹⁹ *Ibid.*, pp. 36-38.

analysis which manifests care, respect and a substantial degree of difference in theoretical positions. He carefully divided his discussion into four logically related sections, namely, an introduction, "Mr. George's Problem," "Mr. George's Explanation," and "Mr. George's Remedy." In discussing "Mr. George's Problem,"¹⁰⁰ Rae asserted that George commits the error of assuming that progress brings poverty when he should actually prove this.¹⁰¹ In order to contradict George's belief that progress brings about poverty, Rae submitted George's own much quoted statement that it is the *relative* rather than the absolute wage share of the distributional product that must fall.¹⁰² Furthermore, Rae also adduced as contrary evidence the statistical findings of various authorities in order to demonstrate that for the long-run in Great Britain, living standards had risen;¹⁰³ the percentage of workers on relief, although high, had diminished;¹⁰⁴ the proportion of rent to the total produce had fallen;¹⁰⁵ and the proportion of wages to total produce had some tendency to increase.¹⁰⁶

In the section entitled, "Mr. George's Explanation,"¹⁰⁷ Rae examined what he considered to be the limitations in George's rejection both of the Malthusian population theory and the wages fund theory; and he engaged in an elaborate and adverse criticism of the American economist's dynamic distributional model. As for the Malthusian theory, Rae agreed that the population doctrine is not always applicable, but like Wicksteed and Longe before him, he insisted that it has some degree of validity.¹⁰⁸ Furthermore, he challenged George's contention that increases in population bring about *increasing* returns to the food supply by attempting to demonstrate that this concept is inconsistent with the idea of a long-run rise in rents, for the latter is fundamentally dependent upon the contrary force stemming from the operation of the law of *diminishing* returns upon the lands.¹⁰⁹ As for George's attack upon the wages fund theory, Rae agreed that the old version involving a *rigid* capital fund was incorrect.¹¹⁰ While he was in accord with George that the amount of wages are dependent upon the size of the current product, he, like Leslie and Laveleye a few years before, maintained that wages are *not* paid from the

¹⁰⁰ *Op. cit.*, pp. 385-405.

¹⁰¹ *Ibid.*, p. 386.

¹⁰² *Ibid.*, pp. 396-97.

¹⁰³ *Ibid.*, pp. 390-91.

¹⁰⁴ *Ibid.*, pp. 391-92.

¹⁰⁵ *Ibid.*, pp. 398-99.

¹⁰⁶ *Ibid.*, pp. 399-401.

¹⁰⁷ *Ibid.*, pp. 406-39.

¹⁰⁸ *Ibid.*, p. 410.

¹⁰⁹ *Ibid.*, pp. 411-15, 427-29.

¹¹⁰ *Ibid.*, pp. 409-10.

current product. Rather, wages are paid out of a variable fund of capital.¹¹¹

In his section on "Mr. George's Remedy,"¹¹² Rae agreed with George only in that he believed that changes were needed in land tenure and use in England.¹¹³ This was because private ownership in land, unlike that in trade and manufactures, does not guarantee the most productive use.¹¹⁴ However, the English writer averred that nationalization would fail to achieve the necessary reforms. Beyond that, he deemed George's recommendation of nationalization without compensation to be repugnant to a healthy national sense.¹¹⁵ Furthermore, repeating the argument that was presented the year before by Marshall, Longe, and Nicholson, Rae submitted that taxing rents alone would yield a smaller revenue than was then secured by the total of all the current taxes.¹¹⁶

In conclusion, John Rae's attitude toward George's writing can perhaps best be expressed in his statement on George's chapters on population and the wages fund:

Nowhere else does he display more strikingly his remarkable acuteness, fertility, and literary power, and nowhere else are these high qualities employed more fruitlessly from sheer want of grasp of the elements of the problems he discusses.¹¹⁷

Joseph S. Nicholson's discussion of George was concerned only with his "nationalization" proposal, which "has attracted most attention in recent years,"¹¹⁸ and "which has caused a good deal of sensation amongst people not very well read in socialistic literature."¹¹⁹ Nicholson had two main arguments against George's scheme. The first was an assertion that the American reformer had the unproven belief that *all* the ills of society can be corrected simply by appropriating rents through taxation.¹²⁰ The second, buttressed by the garnering of statistics, was that the taxation of all of the rents would fall short of the total of the then current tax revenues.¹²¹ Nicholson does see some need for land reform, especially because "results which are mainly due to economic causes are attributed to preferential laws, and a feeling of class hostility is aroused and per-

¹¹¹ *Ibid.*, pp. 418-211

¹¹² *Ibid.*, pp. 418-419

¹¹³ *Ibid.*, pp. 443-444.

¹¹⁴ *Ibid.*, pp. 450-51.

¹¹⁵ *Ibid.*, p. 444.

¹¹⁶ *Ibid.*, p. 443.

¹¹⁷ *Ibid.*, p. 420.

¹¹⁸ *Op. cit.*, p. 77.

¹¹⁹ *Ibid.*, p. 78.

¹²⁰ *Ibid.*, pp. 80-81.

¹²¹ *Ibid.*, pp. 81-82.

petuated."¹²² He concludes about *Progress and Poverty* that theoretically it rests upon a complete misapprehension and perversion of economic doctrine, and that practically the proposals which it advocates would do nothing towards effecting the end in view.¹²³

Professor James E. Thorold Rogers devoted only a brief discussion to George. He noted that George's doctrines were "eagerly accepted as a new gospel" by multitudes of intelligent workers who blame the English land system for the aggravation of their difficulties.¹²⁴ The Oxford professor did admit that the existing land system had some "evil" features.¹²⁵ He maintained, however, that the solution was not to be found in George's remedy, which like that of the "owner of patent medicine," is "single and complete," and which is based on "narrow or exceptional experiences."^{126, 127}

Charles S. Devas, in his sociologically and ethically oriented *Groundwork of Economics*,¹²⁸ found *Progress and Poverty* to be a "useful book for its destructive criticism, but (like other socialist works) of little avail for construction,"¹²⁹ and he found George to be a "fanatic."¹³⁰ Devas praised George first, for having exposed the fallacy that "capital supports labourers;"¹³¹ and second, because much of his criticism of the Malthusian Law of population was correct. However, Devas believed that George went too far, particularly in denying the law of diminishing returns.¹³² Finally, Devas disagreed strongly with George on his conclusion that economic injustices are derived from the private ownership of land rather than from "what human nature is."¹³³

(Continued)

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¹²² *Ibid.*, p. 165.

¹²³ *Ibid.*, p. 166.

¹²⁴ *Op. cit.*, p. 532.

¹²⁵ *Ibid.*, p. 528.

¹²⁶ *Ibid.*, p. 532.

¹²⁷ Interestingly, George held Rogers in rather high esteem. In a letter to a friend, George wrote: "I have been reading Thorold Rogers 'Work and Wages' with much interest. . . . It seems to me, the most effective book against the aristocracy of England that has been written in many a day. . . ." Henry George to Thomas F. Walker, June 13, 1884, HGC.

¹²⁸ This work is not in the same formal analytical category as the other works cited in this paper. For example, it has a chapter entitled "Food and Drink"; the index is called "Index of Criticisms on Errors"; and the book has a "Christian perspective." However, the second edition of the book, retitled *Political Economy* (1901) involves a complete rewriting of the book and fits into the category of standard economics texts.

¹²⁹ *Groundwork of Economics*, p. 546n.

¹³⁰ *Ibid.*, p. 647.

¹³¹ *Ibid.*, p. 546n.

¹³² *Ibid.*, pp. 616, 617n, 618n.

¹³³ *Ibid.*, pp. 647-48.

In Memoriam: Albert Pleydell, 1905-1970

THE SUDDEN DEATH of Albert Pleydell on November 1, 1970 brought to a close a life of distinguished service to his city and to his fellow man.

Al's career with the City of New York started in 1935. Fiorello H. LaGuardia was assembling a group of non-partisan experts to compose his Fusion Administration and appointed him to the Department of Purchase. Here he served with distinction as Deputy Commissioner, and then, from 1942 to 1947, as Commissioner. During World War II he headed, simultaneously, the City's Fuel Administration, the Mayor's Council for Public Service and Training, and the Board of Standardization.

In 1945 Al was the chief architect of the Health Insurance Plan of Greater New York and in 1947 he left the department to assume its presidency for a time. However, his affection for the City went deep and he continued to keep in touch with its problems. He joined the Citizens Union and became chairman of its Committee on Fiscal Affairs and Management. He also became director of research for the Moore Commission on the Government of the City of New York, which prepared the way for the present city charter.

In 1949 he resigned from the Health Insurance Plan to form his own company of management experts, known as Albert Pleydell Associates.

The Robert Schalkenbach Foundation owes much to Albert Pleydell. His father, Arthur, had been a charter member of the Foundation which was organized in 1925 to promote interest in the social theories of Henry George. Al joined the board in 1934 after his father's death, moved on to the executive committee, and became our president in 1960. Under his guidance many useful projects were initiated, including two motion pictures, several round tables and seminars, and a computer program to aid in the study of property tax reform.

A member of the original committee set up to oversee the founding of the *American Journal of Economics and Sociology* in 1941, Al continued to be associated with the *Journal* as an officer. It was with sadness that his name was removed from the masthead after his death.

Al Pleydell will be remembered for his competence, for his fine talent for organization and leadership, and for the youthful enthusiasm he brought to everything he did. More than that, he will be remembered for his modest and pleasant personality, for his friendly smile, and for the outstretched hand with which he greeted one and all.

To his devoted wife, Rose Sixma Pleydell, we extend our deepest condolences.

V. G. PETERSON

Robert Schalkenbach Foundation
New York, N.Y. 10021

REVIEWS

A Transactional Approach to Economic Science

By KARON S. THOMPSON

A VARIETY OF CONFLICTING VIEWS are found among economists on the conduct of inquiry into man's economic behavior. Although few economists have troubled to outline their views on the method of inquiry to be used, the results in the form of numerous textbooks speak for themselves. Outmoded methods are the general rule rather than the exception. Carelessness that lacks even the virtue of poetic license is revealed in the slipshod use of technical terms, procedures that no modern scientific inquirer would tolerate.

One of the outstanding contributions of E. C. Harwood's new book, *Useful Economics*,¹ is the author's demonstration of the methodological and terminological procedures adopted in developing his economic hypotheses.

The author's method of inquiry is what was developed to be the most advanced stage of man's knowing behavior, i.e., the transactional approach as developed by Arthur F. Bentley and John Dewey in *Knowing and the Known*. An important characteristic of the transactional approach is that it is concerned with all significant aspects of quantitative and qualitative changes including the conversion of quantitative to qualitative changes when practicable.

In reporting some of the confusion resulting from inadequate methods of inquiry, Colonel Harwood points out: "Any student who takes the classical demand and supply curves to the mathematics department of his college will learn that the point where the theoretical supply and demand curves cross is without significance because three rather than two variables necessarily are involved. Time, the sometimes unmentioned third variable, cannot be disposed of in practice; and two equations involving three variables are still insoluble. Nevertheless, probably thousands of undergraduates are being required to learn what, to mathematicians, obviously is nonsense."

Outmoded methods of inquiry have long impeded inquiry into man's economic behavior. That such ancient methods as introspection, revelation, and dialectical manipulations or word magic, are still widely used in economics today is illustrated in *Useful Economics*:

¹ *Useful Economics*. By E. C. Harwood, Great Barrington, Mass.: American Institute for Economic Research, 1970, paper, \$1.

"Economic textbooks in great variety are available. Perhaps the most widely used at the moment are those emphasizing the secular revelations of the Keynesian school, but others presenting modern versions of the Marshallian marginal analyses and still others based on seemingly intuitive introspections of a 'reasoning mind' likewise are used."

"The existing situation probably is no worse than that in chemistry during the transition from the days of the alchemists or that in medicine when barbers were in the process of being disqualified as surgeons. The vested interest of senior personnel in academic departments, including both their 'capital fund' of acquired 'knowledge' and their interest in continuing the use of current textbooks must tend to delay progressive change. One simply cannot expect any human being to believe that his accumulated learning of a lifetime as embalmed in his textbooks is largely a collection of outmoded notions headed for the scrap pile."

Now, it should be apparent that methodological procedures have certain priorities, in that it is implicit that we know what aspects of economic behavior are relevant to our inquiries.

Perhaps one of the most important characteristics of the transactional approach is that it requires that the investigator describe the entire situation, including events, objects, and relations among events, thereby eliminating much of the confusion resulting from less adequate descriptions.

Rather than proceed to develop a hypotheses with "... familiar terms or names that long usage has made less precise. . .," Harwood begins with the initial selection of three technical terms, that designate aspects of the situations where we find "... the behavior of man in obtaining physical things modified by him for his use as food, clothing, shelter, and for other purposes."

For the reader who desires to understand economics as a science, *Useful Economics* is the most rigorous scientific report I have read lately. A summary of that report will further demonstrate the painstaking care the author has taken to communicate to readers a comprehensive and thorough description of significant economic relationships:

Differentiating the human organism, man, from other organisms and things found in the cosmos, the author warns the reader that "... ability to differentiate man within his environment implying no ability to study man separate from his environment. What we learn about man's behavior we learn only through observation of the organisms' transactions with their environments, which of course includes their fellow organisms."

The earth, this planet on which the organism, man, is found "... including all things found in or on earth in a natural state and likewise

including the space aspect of the earth that constitutes the area of man's activities. . . ,” is named *terra firma essential*, or abbreviated *ter-fir-ess*. (For convenience in use the technical terms adopted have been shortened by combining the first two or three letters of each word into a coined word.)

The term human processing effort, or abbreviated *hu-pr-ef*, is a name used to describe “. . . all human effort engaged in processing portions of *ter-fir-ess* in order to adapt them to man's use. *Hu-pr-ef* includes what is commonly called ‘mental’ effort as well as the muscular effort of human beings when thus applied.”

The human processing effort, or *hu-pr-ef*, applied to *terra firma essential* is named *ter-hup*, i.e., “. . . portions of *ter-fir-ess* that have been modified by *hu-pr-ef*.”

The application of the terminology developed in the beginning of this report is consistent and complimentary in providing a comprehensive understanding of economic relationships in subsequent chapters reporting on processing at wholesale, manufacturing, agricultural, mining, fishing, hunting, and other levels of the retail markets. For example, in the chapter reporting on processing behavior in agriculture, the author states:

“In general, farming is the initial processing of many aspects of *ter-fir-ess*. Of course, once the processing has begun on any item of what had been *ter-fir-ess*, the modified aspects of that item (modified in form, composition, place, or time) then would be labeled *ter-hup*. This is in accordance with the terminology initially adopted.”

After the initial selection of terms, discussion begins with the typical processing behavior at the retail level in a supermarket, of which nearly all readers have experience. Questions as to “What do managers of retail stores do with purchasing media received in exchange of goods?,” “How do customers of such a retail store get the purchasing media in the first place?,” and “Precisely what are the various forms of purchasing media?,” are answered in detail.

Monetary economics is purported to be the most difficult and widely diversified field in economics. So divergent are the views held among monetary economists “. . . that communication among them is difficult.” As Harwood points out: “Like the several blind men who offered a variety of descriptions as each touched a different part of an elephant, many monetary economists seem to be blind to the economic facts of life. How else can one account for such a variety of findings by people who are by no means ignorant simpletons?”

Contrary to the popular belief that “. . . money-credit matters are too

complicated for all but a few exceptional individuals to understand," Harwood points out ". . . commercial banking is the outgrowth of an evolutionary process that is simple when viewed one step at a time as it must have occurred but that is not so readily understood when one looks only at the results to date."

A detailed description of the evolutionary process of commercial banking is given. Beginning with the bargaining processes of a primitive society, *i.e.*, the grower who exchanges his wheat directly for skins obtained by tribal hunters, to the origination of purchasing media, *i.e.*, claim checks issued by goldsmiths as an exchange value for things offered in the markets. Obviously, as the tribes increased in number, bartering increased, and the need for a meeting place to conduct this activity evolved. "Today we call that meeting place a market or shopping center."

"As the market increased in size and activity men found, to an increasing extent, that gold or claim checks on gold were a convenient medium of exchange. On more and more occasions those who had gold or claim checks on gold found that they could obtain what they wanted with the least difficulty in persuading others to accept what they had to offer."

Such was the first stage of the evolutionary process of commercial banking. Claim checks on gold, and claim checks for other things being offered in the markets were the stock in trade during the initial stage of sound commercial banking.

Today, however, much of the purchasing media or claim checks in circulation represents neither gold nor other things being offered in the markets. When the purchasing media in circulation does not represent things available in the markets it is ". . . excessive or inflationary purchasing media."

Unfortunately, the word "inflation" has become so commonplace that few trouble to inquire into the consequences of its continuation. For over two decades money-credit managers have ignored the catastrophic losses of a continued inflation, and the results recorded in human history are astounding.

"In the United States alone [Harwood points out], continued inflation has 'embuzzled more than \$100,000,000,000 from the 'forgotten man,' the self-supporting citizen who attempts to provide for his responsibilities by means of savings and life insurance."

The regrettable fact is that few economists feel any responsibility to the public that would incline them to demonstrate the warrantability of their findings. That economic hypotheses are adopted without considera-

tion of the consequences reflects the urgent need that scientists employ methods whereby "all assertions made are scientific hypotheses; that is, they are invitations to check against the facts of economic behavior," if such activity is to be worthy of the name "science."

Behavioral Research Council
Great Barrington, Mass. 01230

Canberra: City Rising in the Wilderness

By ROLLAND O'REGAN

THIS BOOK¹ by Frank Brennan is an important work not only because of its scholarship but because it is the only one which covers quite the particular ground. It deals with the history of the city of Canberra and the Australian Capital Territory in which it is situated. This territory of some 900 square miles is situated about 110 miles southwest of Sydney, capital of the Mother State of New South Wales. Prior to 1913 this was open country—waste and pastoral land—and here the Australian federal capital was planned and built. Gradually the various departments of government are being transferred from Melbourne.

The deliberate creation of a modern city in the wilderness makes a story worth telling. This is no ordinary city. It exists solely because it is the center of federal government and administration. It is not an important center of trade, manufacture or communication. It is a city of civil servants and of those who provide them with the necessary services of modern life. It has been planned from the very beginning and its progress has been hampered by the consistent hostility and political opposition of most of the Australian states.

Central to Canberra's history, planning and administration has been the leasehold system of land tenure. There is no freehold land in Canberra city. All land is owned by the Crown, *i.e.* the federal government. This has been a tremendous advantage especially in the field of planned land use. But as the city has grown from a village it has encountered increasing political and administrative difficulties. To derive leasehold contracts suitable for all types of property in a modern city which satisfies the widely varying needs of lessees and at the same time safeguards the rights of the

¹ *Canberra in Crisis*. By Frank Brennan. Canberra, Australia: Dalton Publishing Co., 220 pp., illustrated, A\$4.50.

lessor is no small task. Further it is a pioneering task. There are no proved and time-tested guidelines. It is breaking new ground. It demands very special legal and political talents to devise and administer a leasehold system adapted to the complex needs of a modern city which itself must respond to changing patterns of transport, population, growth and technology. In Mr. Brennan's view Canberra has proved itself to be an administrative disaster area.

Today there is a crisis in Canberra and that is what this book is all about. For the past ten years, Mr. Brennan has been intimately involved in Canberra's affairs. He is a legal officer in the Attorney General's department. From this vantage point he has studied the city in depth, as the details of the picture he draws so clearly show. He tells the story not only of the city's growth over the past 50 years but also its very genesis in the politics and ideals of 19th century Australia.

Incidentally, it may be mentioned that two distinguished Americans made a significant contribution to the Canberra story. They are Henry George, the popular economist, and Walter Burley Griffin of Chicago, pioneer town planner. It may be said that George created the soul and Griffin defined the physical form of this remarkable city.

Years of research have gone into this book but quite fortuitously as it neared completion the Canberra crisis reached its climax. New policies were developed which will radically modify the very basis of the leasehold system of land tenure. These developments dramatically support the author's main contention that drastic reforms were urgently needed in the land administration of Canberra. However the changes proposed by the federal government differ radically from those the author advocates and in a forceful postscript he gives his views of the proposed future policies.

This is not a book for the purely academic economist. But as a study of the impact of economic theory on the real world of politics and government it has a singular fascination.

There is a crisis situation in the cities of the modern world. It centers on slums, smog, noise, ugliness, squalor and crime. Canberra's crisis is quite different. The author sees it not so much as a political or administrative crisis but rather as a moral crisis. This was to be a model city. There would be no crime-breeding slums. Public amenities would be ideal. This would be the perfect setting for really civilized living. It would also be a social laboratory in which would be produced the remedies for all the dreadful problems that beset the modern city. This was the founders' dream. Mr. Brennan sees this ideal endangered by what

he regards as political ineptitude and administrative incompetence. The city is in danger from the enemy within and he has sounded a loud alarm.

Wellington 3, New Zealand

Population Estimation by Sampling

Report of the Population Growth Estimation Experiment. Karachi-1, Pakistan: The Pakistan Institute of Development Economics (Old Sind Assembly Building, Bunder Road), December, 1968, 217 pp., Rs. 6.00; foreign: US\$2.50.

This experiment, on which Sultan S. Hashmi was principal investigator, was designed in 1961 by the Central Statistical Office of the Government of Pakistan and the Pakistan Institute of Development Economics, with financial and advisory help from the Population Council, New York, and the U. S. National Institute of Health Statistics. The experiment, employing sampling techniques, achieved series of adequately reliable and usable yearly estimates of birth and death statistics and rates for the period 1962-65. In addition to reporting the results for 1962 and 1963 this publication makes the techniques available to developing countries. They are already in use in India, Thailand, Turkey and other countries. One result: by 1984 East Pakistan alone can have a population of more than 100 million, compared with the figure reported (as a result of under-registration) for East and West Pakistan together in the 1961 Census: 93.8 million.

W.L.

Conflicts in India

Social Tensions in India. By G. S. Ghurye. Bombay, India: G. R. Bhatkal for Popular Prakashan (35c, Tardeo Road, Bombay 34 WB, India), 1968, 552 pp., index, Rs. 72.

Professor Ghurye, a doyen of sociology and anthropology in India who is well known in the United States for his many publications and those of his students, examines from a sociological viewpoint the nature and causes of group tensions in India. He discusses the Hindu-Muslim conflict from the point of view of a sociologist and sheds light on similar minority conflicts elsewhere in the world. He also discusses the language conflict, an aspect of tension between subcultural groups. He holds that the culture and society of the Hindus and the Moslems have

always run parallel and thus partition accords with the data of the objective situation. Tensions have continued after partition because Moslem expectations are unfulfilled and thus the Moslems are afflicted by frustration. His final chapter—Integration or National Solidarity?—makes an important contribution toward understanding the domestic situation in India, even if it does end on a despairing note: prospects for national solidarity are rather bleak.

W.L.

Dating Business Cycles

Dating Postwar Business Cycles: Methods and Their Application to Western Germany, 1950-67. By Ilse Mintz. New York and London: Columbia University Press (for the National Bureau of Economic Research), 1969, 111 pp., index, \$3.75.

FOR DATING BUSINESS CYCLES of the U.S. economy there is a vast array of statistical and other information. These data are not available, at least not in such profusion, for other economies. The National Bureau of Economic Research has developed mechanical procedures usable for the analysis of the cycles of such economies. Extensive experiments show that these procedures are likely to yield business cycle turning dates within a month or two of those obtained by less mechanical methods. Mrs. Mintz has applied the approach with reference to the West German economy with results which give precision to notions about changes in German economic activity.

W. L.

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THE ASSESSMENT OF LAND VALUE

EDITED BY DANIEL M. HOLLAND

Proceedings of a Symposium Sponsored by the Committee on Taxation, Resources and Economic Development (TRED), 1969

Of interest and assistance to scholars in economics, business, public finance and administration, political science, planning, and urban affairs, and to practicing lawyers, municipal and county administrators, planners, assessors, bankers, developers, and others concerned with the role of property taxation in social development.

Contents: *Introduction*, Daniel M. Holland. *Can Land be Assessed for Purposes of Site Value Taxation?*, Ursula K. Hicks. *Defining Land Value for Taxation Purposes*, William S. Vickrey. *Land Value Taxation in Light of Current Assessment Theory and Practice*, Kenneth Back. *Reckoning with Imperfections in the Land Market*, John M. Copes. *Preparation and Use of Land Value Maps*, Donald R. Beach. *Estimating Residential Land Value by Multivariate Analysis*, Paul B. Downing. *A Computerized Assessment Program*, Ted Gwartney. *Legal Problems and Obstacles in Assessing Land for Site Value Taxation*, Arthur D. Lynn, Jr. *Adequacy of Land as a Tax Base*, Mason Gaffney. *Transition to Land Value Taxation: Some Major Problems*, C. Lowell Harriss.

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Environmental Protection at Minimum Cost*

By WILLIAM J. BAUMOL

THE GREAT PUBLIC OUTCRY for the protection of the environment is unlikely to prove a transitory matter. The mounting flow of trash, the increasing pollution of the atmosphere, the growing level of noise will constitute unremitting irritants capable of maintaining political pressure that governments will be unable to ignore.

The issue is whether one can devise measures that will prove effective in protecting environmental quality and whether these are, in fact, likely to be adopted. This is of interest not only as a matter of general public welfare. It is important for those who are concerned with investments in pertinent economic activities—in pollution control devices, in noise abatement equipment, etc. It is obviously relevant also for the industries whose operations contribute to the basic problems.

This paper describes one of the proposals most widely advocated by economists for the control of pollution and other environmental problems. The proposal seeks to minimize the use of direct controls and to provide effective encouragement to industry to take appropriate remedial action. Its basic approach is the imposition of effluent charges in the most general sense—the taxation of activities that contribute to environmental problems and remission of taxes on activities that help to remedy them. The proposal claims for itself a number of advantages, not the least among them being

* From a report by Dr. William J. Baumol, professor of economics, Princeton University and New York University, as chairman of the New Jersey State Economic Policy Council, to William T. Cahill, Governor, State of New Jersey, May, 1971.

efficiency (in terms of cost) in the achievement of whatever goals are adopted in the area. Moreover, the program in question has another considerable virtue. Unlike most other measures that have been advocated for the purpose, it need not add to the financial burdens of the state and local governments.

Given the tremendous and growing financial pressures to which the public sector of our economy finds itself subjected, it is not implausible that methods of the sort discussed here will be employed ever more frequently by harassed governments under constant pressure to do something about the environment, but in no position to devote large quantities of money for the purpose. Already at the federal level there is a bill calling for a system of effluent charges to protect our waterways, and the President has advocated a tax on leaded gasolines. A number of states have just enacted related measures, and they are under consideration in many others.

Even where a new tax is under consideration primarily because of revenue needs, it is tempting to achieve two goals for the price of one—to increase the flow of revenues to the public treasury in a way that provides very powerful incentives for improvements in the quality of life. Once experience confirms the efficacy of these measures, their popularity seems very likely to increase.

I

Alternative Policy Proposals

A VARIETY OF POLICIES have so far been proposed for the protection of the environment. Clearly, any effective policy has to be flexible and must employ a variety of instruments. The bulk of the methods that have been proposed so far, however, are *by themselves*, simply incapable of doing the job. In fact, one sees evidence that this is beginning to be realized by policy makers, many of whom are now turning to the methods that some economists have been advocating since 1911, long before the issue had become very fashionable.

The standard approaches consist, essentially, of three measures offered in varying dosages. The first of these is moral suasion; the appeal to the conscience of the businessman and the general public to adopt a new and finer code of virtue. THE SECOND IS INCREASED PUBLIC INVESTMENT. WHEN something isn't working well the obvious solution seems always to call for the government to spend more money. In this case it is proposed to have the public sector build more disposal plants, clean up slag heaps, undertake the control of oil spills, etc. In effect, the government is asked to undertake a gigantic sanitation operation, cleaning up after the activities

of industry. The third approach, which is perhaps the most popular of all, is outright prohibition by law.

The Appeal to Conscience. Moral suasion has its limitations, not because businessmen are less moral than other people but because asking businessmen to bear the brunt of the task on a voluntary basis is a request to do the impossible. If the firm is to devote on a voluntary basis the huge resources that will be needed to deal with the environmental issues, it must undertake to spend the stockholder's money in a way the stockholder has not authorized. More important, it requires management to put its enterprise at a severe competitive disadvantage, perhaps thereby even undermining the viability of the firm.

Governmental Outlays to Protect the Environment. The second of the popular proposals for the protection of the environment is the government expenditure approach. More will have to be spent on waste-treatment plants, and something will have to be done to clean up the enormous mess inherited from our predecessors and to which we still continue to contribute at most alarming rates. But we once again ask the impossible if we expect the government to cope in this way with, for example, the flow of garbage as it grows at its massive exponential rate. The fact is that waste-treatment plants are generally inadequate before they are completed, and sometimes even before they are planned. Man simply cannot cope with the problem unless, simultaneously, something is done to decelerate the flow of garbage that his society generates.

Direct Controls. The third method of environmental control, direct prohibition, suffers from a variety of problems, many of which are, no doubt, brought to mind by the term *prohibition* itself. The effectiveness of such measures clearly depends upon the vigor of the enforcement mechanism. We have seen, for example, the workings of laws forbidding the use of incinerators in apartment houses under which landlords are occasionally subjected to token fines on something like a random basis. They then simply continue to run their incinerators because it is far cheaper to pay the fines than to undertake alternative measures for waste disposal. Thus, the incinerators continue to emit their noxious fumes even though incineration has been prohibited absolutely and categorically.

Also, enforcement depends on policing, and this in turn offers all sorts of temptations and leads in too many cases to outright corruption.

Even in those cases where direct controls have made a difference, their effects are all too likely to prove transitory. In the first blush of public

enthusiasm the severity of standards is increased and enforcement is relatively effective. However, several years later, when public attention has focussed on other issues and the subject is no longer in the headlines, the strength of its enforcement mechanism ebbs. The regulatory agency then takes on the characteristic lassitude that is most easily compatible with self-preservation and the avoidance of trouble.

Finally, direct controls suffer from a serious *economic* disadvantage. Even when they achieve their purpose—a reduction in the smoke content of the atmosphere or the noise level near an airport or in the number of substandard houses in a slum neighborhood—they are likely to do so in a manner that is highly inefficient, wasting the resources of society in the process.

Suppose that an agency has been directed, say, to cut by 60 per cent the total emission of certain pollutants into a river into which many plants are pouring industrial wastes. As a matter of fairness, if for no other reason, the regulatory agency is likely to assign a similar quota to each of the offending plants—to prohibit any plant from emitting more than 40 per cent of its former flow per unit of time. Any other basis for the setting of quotas would seem discriminatory; yet a little thought shows that the procedure is apt to prove quite inefficient. Some of the plants, very likely those that are relatively new and adaptable, can decrease their efflux at very little cost to themselves. In others, the cost of reducing the outflow of pollutants by some given amount will be very high. Consequently, one would expect that the cost-minimizing assignment of reductions in pollution will normally not involve proportionate decreases in emissions. To minimize total costs a plant which can decrease its pollution outflow cheaply and easily might be asked to effect an 80 per cent reduction in its effluents, while another whose adaptation cost is high might be assigned only a 20 per cent reduction. And yet, as we have noted, an assignment of such uneven quotas is likely to be considered discriminatory, and is therefore likely to be unpalatable to a regulatory agency.

Environmental Problems and the Price System. PUT VERY BRIEFLY and very superficially, many economists argue that the source of the environmental problem is the fact that the price system simply is not applied to many of society's resources. Its fresh air, its clean rivers, its good neighborhoods are resources that can be used up in the productive process just as coal, electricity, and steel are consumed. But while a price related to cost of production is charged for fuel and raw materials, the air and our other environmental resources can be used up without payment for the privilege. The economist is impressed by the efficiency with which the economy

utilizes resources that are supplied under the rules of the price system. Industry uses its raw materials with a degree of care and efficiency that is perhaps unparalleled in economic history. Yet, at the same time, the air supply deteriorates progressively, the rivers are transformed into sewers, and the neighborhoods into slums. What has gone wrong?

Experience tells us what happens when costly resources are supplied free of charge.

II

Tax Incentives for Environmental Protection

THE PROPOSAL that the economist, consequently, makes is a very simple one. He maintains that there is no excuse for supplying expensive resources free. He says that those resources should be provided at an appropriate price just like the resources supplied by private industry. More specifically, he calls for a reorientation of the tax system, one that does not necessarily increase the overall burden of taxes. An example will, once again, help to clarify the issue.

Suppose it were decided that the oil industry were currently paying the right total amount in taxes, but that taxation were to be used to help get the lead out of its products. For this purpose one could reduce by, say, \$0.03 a gallon the tax on unleaded gasoline and increase it by a similar amount on leaded gasolines. This is clearly not punitive. On the contrary, it gives the industry the opportunity to recoup its money by behavior consistent with social goals. Nor does this procedure constitute a drain on the public budget or a subsidy to industry. Given the efficiency with which private enterprise is able to proceed in the pursuit of profits I suspect the speed of the resulting changeover to lead-free fuels will truly be impressive.

Similarly, in the neighborhood of airports much can be accomplished by a substantial differential in landing fees depending on the noise level and pollution emission level of the airplane.

In the same way, the flow of trash can be reduced by imposing a significant tax on no-deposit-no-return containers, perhaps matched by a reduction in excise tax on items in returnable containers.

Or, to give yet another illustration, there is much to be said for a reorientation of laws on rental property which offers some material advantage to the improvement of buildings, and under which the landlord who pollutes his neighborhood by creating a slum—by failure to maintain his property or by abandoning his property outright—has to pay the cost that he imposes on society.

In each of these cases the basic notion is the same. By giving virtue its just (financial) reward the rules of the game are changed so that industry is induced to accomplish what society wishes of it.

Besides its obvious attractions, this approach has several additional virtues. In many cases, it is virtually self-enforcing. Its instrument is typically the meter rather than the police inspector. For example, the proposed tax on leaded gasoline requires no more than a record of how much of each type of gasoline has been sold, and the tax can be collected just as it is today. The emission of pollutants by a factory can also be metered and billed. There are no crimes to be discovered, no courtroom hearings, and no legal battles over level of fines. Enforcement is consequently not sporadic—it is continuous, predictable to the business planner and consequently, effective. In this respect it differs markedly from the reality of outright prohibition.

The taxation approach to the protection of the environment also has the virtue of longevity. That is to say, because it is automatic, because it is self-enforcing, it will still be effective five, ten, and twenty years after it was enacted, when public interest in the subject has waned. A tax on smoke emission which is billed monthly will continue to exert its influence on managerial decisions indefinitely. Unlike a program dependent on the vigor of a regulatory agency, the tax incentive does not require continued enthusiasm for the cause. It can, thus, transform a transient public outcry into a permanent influence that affects significantly the behavior of the economy.

The tax approach, at least in principle, achieves its reductions in effluents, in noise, and in smoke in a manner that minimizes the total cost of the changeover. Without assigning quotas to anyone, or interfering in the operations of the individual enterprise, it provides the incentives for each firm to make those decisions which in the aggregate will make the cost of pollution control as low as possible.

To illustrate consider the earlier case where it had been decided to reduce the total influx of pollutants into a river by 60 per cent. Suppose that instead of assigning a quota to each company with a plant on the river, a tax on the discharge of wastes is imposed, a tax sufficiently high to achieve the desired reduction in the pollution content of the river. The firm for which it is very cheap to reduce emissions will find it profitable to cut down on its effluents substantially because, for it, the installation of the required equipment will be less costly than the taxes. On the other hand, the firm for which such a changeover is very expensive will find it cheaper to pay the tax than to undertake a substantial conversion. The

first firm may then find it most profitable to cut its discharges by 80 or 90 per cent, while the second company may end up with no more than a 10 or a 20 per cent reduction. Thus, the difficult task of assigning emission quotas to the various plants in accord with the requirements of efficiency is taken care of automatically by the tax incentive approach. It does so without direct interference in the decision processes of the individual firm and without recourse to direct controls.

III

Conclusions

IN SUM, the tax reorientation approach offers a variety of attractive features. It is equitable—it charges only those who engage in the activities that threaten the environment and bases the charges on the extent of the taxpayer's contribution to the environmental problems; it is automatic and self-enforcing; it minimizes the need for enforcement machinery and the temptations for corruption; it does not increase the financial problems of state and local governments; it is effective and makes full use of the productive efficiency of the free enterprise system: its effects are long lived, and it promises to achieve its goals at minimum overall cost to the economy.

Society has been giving away, free, too many of its precious resources far too long. It is not as scandalous as it sounds to decide that everything has its price. The real scandal lies in setting that price at zero or at some token level that invites us all to destroy and to despoil. Unless we recognize the legitimate role of taxation in this area, we may end up with our sense of morality intact but our environment in ruins.

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Conserving Our Traditional Freedom

THE BACKGROUND OF William O. Douglas's latest book, *Points of Rebellion*, is that this century—a century of change on a geometrically accelerating scale—has thus far managed to bring an increase in wealth, population and poverty together with knowledge, ignorance and degradation. A planet-and-earth technology with an oxcart society. A nation capable of spending \$35 billion to land men on the moon and to prepare in the 1970s on the budgets by which Americans care for their brethren. A time marked by the frustrations of seeking peace through a United Nations and by a continuing Goliath of arms and tensions.

Addressing himself to man's continuing inhumanity to himself, the

author has given us his views of one possible future. Fortunately, hope emerges from his Pandora's box of facts and fears. Justice Douglas therefore rejects the dismal utterance of Thomas Wolfe who, at the age of 24, wrote in his *Diary* that "The mountains were my masters, the unyielding mountains which were beyond the necessity of growth and change." Justice Douglas concedes that, in general, inevitability characterizes life. But nevertheless he holds that man has some ability to alter its course, and to grow and to change. And, additionally, that man is the measure of things and does not exist for others (or, as the Greeks would have it, for the pleasure of the gods). So that in this view Justice Douglas is a humanist, one who sees humans as somewhat able to control themselves and their futures within defined limits.

For at least fifty years violence and rebellion have been a continuing part of the national scene. These twins helped found the American experiment and have never vanished, but it is their extent and proliferation which today cause alarm. Half a century ago it was materialism which dominated the nation; today it is idealism. Youth then misguided may still be so today, but who is to decide, and why? If the generation gap discloses a failure in communication and understanding, it also points up this viable dissimilarity and divergence.

If a conservative is one who seeks to conserve and to retain, albeit change as dictated by societal forces and by reason, then both Roosevelts and the other chief executives in this century have been such. So, too, have been the people in power, that is, the so-called Establishment, although for various reasons. Conservatism, therefore, takes on different hues such as economics, politics, humanitarianism, law, and others.

For example, the so-called Warren Court has been assailed as revolutionary and downright treasonable, leading the country to chaos, and yet its decisions have been in the mainstream of American ideology. In this sense its Justices have been conservatives. And if Burkean 18th century liberalism is the historic base for conservatism, then Douglassian warnings of the need for the current (technological) Establishment to bend slightly to the winds of rebellion follow those earlier far-seeing counsels addressed to the benevolent oppression of Burke's own Establishment, namely, the landed and entrepreneurial gentry whom the newly emerging classes opposed. Unyielding stubbornness which adheres to abstract principles may thus result in rebellion and social chaos; so cautioned Burke, and so cautions Justice Douglas.

[From remarks at a symposium at Brooklyn Law School on April 10, 1970, on Mr. Justice Douglas's *Points of Rebellion*.]

MORRIS D. FORKOSCH

Some Determinants of Government Expenditures Within Metropolitan Areas

By EMIL M. SUNLEY JR.*

I

Introduction

THE VERY WORDS "central city" and "suburbs" bring up images of a sharp dichotomy. The central city is the home of the poor, the non-Whites, and the aged whereas the suburbs are the home of White middle and upper class families with two cars in the garage and three children in school. The population of the central city is declining as high income White families seek suburban amenities and are replaced by low income newcomers, often non-White. The suburbs are hard-pressed to meet the rising costs of public education while the central cities struggle with increased expenditures necessary for police protection and welfare payments.

Empirical studies of the variation in per capita state and local expenditures have generally accepted the notion that there is a dichotomy between central cities and suburbs. Harvey E. Brazer estimated the per capita direct general expenditures of local governments in central cities and outside central cities for the twelve largest metropolitan areas in 1957.¹ Woo Sik Kee examined the differences in per capita general expenditures of central cities and outside central cities for thirty-six Standard Metropolitan Statistical Areas (SMSA's) in 1957.² Campbell and Sacks fitted separate regression equations to explain the variation in per capita expenditures among thirty-six central cities and among the non-central city portion of the same SMSA's. They also examined the determinants of the differences in per capita expenditures between the central city and the non-central city portion of the SMSA.³ Morris Beck has emphasized the fiscal

* The author is an economist with the Office of Tax Analysis, U.S. Treasury Department. The opinions in the article are the author's own and are in no way a reflection of those of the Treasury Department. This article is based on an unpublished Ph.D. dissertation completed in 1968 at the University of Michigan. The author is most grateful to Harvey E. Brazer, the chairman of the dissertation committee.

¹ Harvey E. Brazer, "Some Fiscal Implications of the Urban-Rural Dichotomy" in *Urban and Suburban Development*, 1962, ed. Guthrie S. Birkhead (Syracuse: Syracuse University, 1962), pp. 61-82.

² Woo Sik Kee, "Central City Expenditures and Metropolitan Areas," *National Tax Journal*, 18, (December, 1965), pp. 337-53.

³ Alan K. Campbell and Seymour Sacks, *Metropolitan America: Fiscal Patterns and Governmental Systems* (New York: The Free Press, 1967).

disparities in metropolitan areas.⁴ And, most recently, Woo Sik Kee has examined the determinants of city-surburban differentials in fiscal effort.⁵

The stereotype of a sharp dichotomy between the central city and the

TABLE 1
EXPLANATION OF ABBREVIATIONS USED IN TABLES 2-7

Abbreviation	Explanation
Y	Median family income, 1959 (thousands of dollars)
Y-	Per cent of families with incomes under \$3,000, 1959
E/R	Employment-resident ratio
Dist	Distance from central city (miles)
Pop	Population, 1960 (thousands)
Den	Population density (thousands per square mile)
M	Per cent of population moved into house after 1958
OOH	Per cent of occupied dwelling units owner occupied, 1960
C-V	"Dummy" for city or village (or borough) (city = 1)
Δ Pop	Per cent increase in population, 1950 to 1960
FB	Per cent of population foreign born or native of foreign or mixed parentage, 1960
Const	Constant
Std Dev	Standard deviation of the dependent variable
Std Err	Standard error of estimate
F	F ratio
R^2	Coefficient of determination

suburbs, though useful for some purposes, may greatly oversimplify the social and economic patterns within a metropolitan region. Within the

⁴ Morris Beck, "Fiscal Disparities in Metropolitan Areas: Approaches to the Fiscal Dilemma of the Central Cities," *Proceedings of the National Tax Association* (October 22-26, 1967), pp. 65-75.

⁵ Woo Sik Kee, "City-Suburban Differentials in Local Government Fiscal Effort," *National Tax Journal*, 21 (June, 1968), pp. 183-89.

central city there are neighborhoods of varying social and economic characteristics. There are luxury apartments and ethnic ghettos; the central business district and single-unit residential areas. At the same time, suburbs are not a homogeneous group. High income residential suburbs may border low income residential suburbs or industrial enclaves.⁶

Separating the central city from the suburbs may get at some of the variation in per capita public expenditures within an SMSA. However, the level and mix of public services demanded by the different suburbs may be quite different. There may be more variation among suburbs than between the central city and all suburbs.

This study examines the variation in per capita public expenditures in 1962 for police, fire, and parks and recreation of municipalities with a population of over 10,000 in 1960 for each of four SMSA's—Cleveland, Detroit, Minneapolis-St. Paul, and Pittsburgh. The main statistical method used is multiple regression analysis. The independent variables are social and economic characteristics of the municipalities which are plausible determinants of the level of per capita expenditures.

The purpose of this study is to investigate two important questions about the variation in per capita expenditures within a metropolitan region. First, the question of whether the predictor variables which explain the variation in expenditures among the suburbs can also explain the high per capita expenditures of the central city. This question is answered by two tests: 1) a comparison is made of regressions which include and do not include the central city as one of the observations; 2) the regression results which exclude the central city are used to estimate the per capita expenditures of the central city.

Second, previous studies which have examined the variation in per capita expenditures within a metropolitan region examined only one metropolitan region, and thus were unable to determine if the empirical results could be generalized to other metropolitan regions.⁷ In this study the

⁶ Two recent studies have pointed out the great difficulty in generalizing about the social and economic patterns within a metropolitan region. Leo F. Schnore, "The Socio-Economic Status of Cities and Suburbs," *American Sociological Review*, 28 (February, 1963), pp. 76-84. Advisory Commission on Intergovernmental Relations, *Metropolitan Social and Economic Disparities: Implications for Intergovernmental Relations in Central Cities and Suburbs* (Washington, D.C.: Government Printing Office, 1965). The latter study is summarized in Marjorie Cahn Brazer, "Economic and Social Disparities Between Central Cities and Their Suburbs," *Land Economics*, 43 (August, 1967), pp. 294-302.

⁷ See John C. Bollens, ed., *Exploring the Metropolitan Community* (Berkeley: University of California Press, 1961); Julius Margolis, "Municipal Fiscal Structure in a Metropolitan Area," *Journal of Political Economy*, 65 (June, 1957), pp. 225-36; Oliver P. Williams, et al., *Suburban Differences and Metropolitan Policies* (Philadelphia: University of Pennsylvania Press, 1965); Seymour Sacks and William F. Hellmuth, *Financing Government in a Metropolitan Area* (Glencoe, Ill.: Free Press of Glencoe, 1961); and Robert C. Wood, *1400 Governments* (Cambridge, Mass.: Harvard University Press, 1961).

TABLE 2

"BEST" REGRESSIONS FOR EACH SMSA: PER CAPITA POLICE EXI

No.	SMSA	Y	Y-	E/R	Dist	Pop	Den	M
Detroit								
1.	with central city	.65* (.28)	.21* (.10)	.054* (.008)	-.46* (.09)			
2.	without central city	.65* (.28)	.19 (.11)	.054* (.008)	-.45* (.09)			
Cleveland								
3.	with central city	.50* (.22)	.58* (.10)	.0072* (.0027)	-.17* (.06)			
4.	without central city	.55* (.22)	.47* (.14)	.0065* (.0027)	-.14* (.07)			
4a.	without central city	.45* (.17)	.27 (.17)	.0052* (.0022)	-.19* (.07)	-.057* (.015)		
Minneapolis-St. Paul								
5.	with central cities	.78* (.25)	.65* (.11)					.12* (.06)
6.	without central cities	.75* (.26)	.48* (.19)					.10 (.06)
Pittsburgh								
7.	with central city			.015* (.006)	-.13* (.06)		.18* (.09)	
8.	without central city			.011* (.005)	-.05 (.06)		.18* (.07)	

*The coefficient is twice its standard error.

generality of the results are tested in two ways: 1) a comparison is made of the best explanatory variables for each SMSA; 2) the best explanatory variables for the Detroit SMSA are tested against the other three SMSA's.

II

Findings of the Regression Analysis

SEPARATE REGRESSIONS were estimated for per capita police, fire, and parks and recreation expenditures for each SMSA including and excluding the central city (cities) as an observation. These regressions are referred to as the "best" regressions for each SMSA and are presented in Tables 2-4. (Table 1 contains an explanation of the abbreviations used in Tables 2-7.)

The best explanatory variables for the Detroit SMSA were tested against the other three SMSA's. These regressions are referred to as the "Detroit comparison" regressions and are presented in Tables 5-7. The "Detroit comparison" regressions are crucial in determining whether the statistical results for one SMSA can be generalized to the other metropolitan regions.

The selection of the Detroit regression results as a basis for comparison with the other three metropolitan regions was somewhat arbitrary. The Detroit SMSA was selected in part because this is the metropolitan region with which I am most familiar and in part because this was the first metropolitan region investigated. The conclusion as to the generalization of the regression results of one SMSA to the other metropolitan regions probably is not affected by the choice.

III

Generality of the Regression Results

THE GENERALITY of the regression results is tested both within SMSA's and between SMSA's.

Within SMSA's

The question whether the central city (cities) comes from the same underlying population as the suburbs is first answered by a simple F ratio test known as the Chow test.⁸ If the calculated F ratio is greater than

$$s_F = \frac{\sum (\hat{Y}_{wo} - \hat{Y}_w)^2 + \sum (Y_{cc} - \hat{Y}_{cc})^2}{\sum (Y_{cc} - \hat{Y}_{cc})^2} \cdot \frac{(n-k)}{III}$$

with $m, n-k$ degrees of freedom where:

\hat{Y}_{wo} = estimated value of dependent variable for the suburbs in regression equation which does not include the central city (cities)

\hat{Y}_w = estimated value of the dependent variable for the suburbs in the regression equation which does include the central city (cities)

TABLE 3

"BEST" REGRESSIONS FOR EACH SMSA: PER CAPITA FIRE EXP

No.	SMSA	Y	Y-	E/R	Dist	Pop
Detroit						
9.	with central city	.99* (.34)	.26* (.13)	.045* (.010)	-.16 (.11)	
10.	without central city	.98* (.34)	.29* (.13)	.044* (.010)	-.19 (.11)	
Cleveland						
11.	with central city	1.09* (.25)	.35* (.16)	.012* (.003)		-.0098* (.0044)
12.	without central city	1.09* (.25)	.25 (.23)	.011* (.003)		-.011* (.005)
Minneapolis-St. Paul						
13.	with central cities	.33 (.29)	.76* (.12)		-.27* (.10)	
14.	without central cities	.32 (.27)	.58* (.18)		-.21* (.10)	
Pittsburgh						
15.	with central city			.018* (.006)	-.17* (.05)	
16.	without central city			.015* (.005)	-.12* (.05)	

* The coefficient is twice its standard error.

$F_{.05}$, the hypothesis that the central city comes from the same linear relation is rejected at the 95 per cent confidence level.

The calculated F ratios by expenditure function for each SMSA for the "best" regressions and the "Detroit comparison" regressions are presented in Table 8. The nine cases in which the calculated F ratio is greater than $F_{.05}$ are identified by an asterisk.

In all cases for the Pittsburgh SMSA, the statistical evidence indicates that the central city does not come from the same linear relation as the suburbs. In contrast, the statistical evidence indicates that the central cities Detroit, Cleveland, Minneapolis, and St. Paul do come from the same underlying population as the suburbs for their respective SMSA's. Two exceptions to this result are the parks and recreation expenditures for Detroit and Cleveland in the "best" regressions. In these two cases, the calculated F ratios are greater than $F_{.05}$ but less than $F_{.01}$.

The question whether the predictor variables which explain the variation in expenditures among the suburbs can also explain the high per capita expenditures of the central city may be answered, in part, by estimating the per capita expenditures for the central city by means of the regressions which do not include the central city as an observation. The test is whether these estimated values are consistently below the actual values by two or more times the standard error of estimates. The residuals (actual—estimated expenditures) for the central cities are given in Table 9.

The conclusions to be drawn from the table are very similar to those drawn from Table 8. With three exceptions, residuals which are twice their standard errors are for the same central cities and expenditure functions as the F ratios which are greater than $F_{.05}$. These three exceptions are the estimates of per capita fire expenditures for St. Paul in both the "best" and "Detroit comparison" regressions and the estimate of per capita parks and recreation expenditures for Cleveland in the "Detroit comparison" regression. In each of these cases the residual is twice its standard error though the F ratio is less than $F_{.05}$. The explanation for the two exceptions involving the city of St. Paul is straightforward. The Chow

Y_{cc} = actual value of the dependent variable for the central city (cities)

\hat{Y}_{wo} = actual value of the dependent variable for the suburbs

n = number of suburbs

k = number of independent variables

m = number of central cities

This F ratio test was developed by Gregory C. Chow. It is applicable so long as $m \leq k$. Gregory C. Chow, "Tests of Equality between Sets of Coefficients in Two Linear Regressions," *Econometrica*, 28 (July, 1960), pp. 591-605. This test is also presented in J. Johnston, *Econometric Methods* (New York: McGraw-Hill Book Company, Inc., 1963), pp. 136-38.

TABLE 4

"BEST" REGRESSIONS FOR EACH SMSA: PER CAPITA RECREATION

No.	SMSA	Y	Y-	E/R	Den	FB	Pop
Detroit							
17.	with central city	.61* (.27)	-.18 (.10)	.050* (.008)			
18.	without central city	.59* (.26)	-.24* (.09)	.052* (.008)			
Cleveland							
19.	with central city	.36* (.13)		.010* (.003)	.35* (.08)	-.20* (.03)	-.0037* (.0018)
20.	without central city	.43* (.12)		.0086* (.0030)	.28* (.07)	-.18* (.03)	-.0031 (.0017)
Minneapolis-St. Paul							
21.	with central cities	.72 (.42)	.98* (.17)				
22.	without central cities	.74 (.44)	1.13* (.28)				
Pittsburgh							
23.	with central city						
24.	without central city						

* T = coefficient is twice its standard error.

test was whether the two central cities, Minneapolis and St. Paul, come from the same underlying population. In contrast, the standard error test examines the question separately for each central city. The conclusion from the Chow test may be that the statistical evidence indicates that the two central cities considered together come from the same underlying population whereas the standard error test indicates that one of the central cities, St. Paul, considered by itself, does not.

There are several cases where an inspection of the coefficients in the regressions with and without the central city included as an observation might lead one to conclude that the central city does not come from the same linear relation as the suburbs, but the Chow test and the examination of the residual for the central city lead to the opposite conclusion. For example, in the "best" regressions, the coefficient for the per cent of families with income under \$3000 is markedly shifted depending on whether or not the central city is included in the Cleveland fire regressions (no. 11-12) and the Minneapolis-St. Paul police regressions (no. 5-6) and fire regressions (no. 13-14). In the case of the Cleveland fire regressions, the coefficient is no longer significant at the .05 level of significance when the central city is not included. Nevertheless, the Chow test indicates that the central city is in fact from the same linear relation as the suburbs. To some degree the large shift in the coefficient of the per cent of families with income under \$3000 is due to the increased variance of the independent variables when the central city is included.

The conclusion from Tables 8 and 9 is that the predictor variables for the suburbs can explain the per capita expenditures for the central city except for all expenditure functions for the Pittsburgh SMSA and for parks and recreation for Detroit and Cleveland SMSA's. These exceptions need explanation.

The major explanation for the results in the Pittsburgh SMSA is not that the central city expenditures are so very high relative to the suburbs, but rather that the per capita expenditures of the suburbs are so very low relative to the central city. This applies especially for fire protection and parks and recreation, due mainly to the presence of boroughs which tend to have lower per capita expenditures than incorporated municipalities. It is interesting to note that the presence of villages in the Minneapolis-St. Paul SMSA, which are similar to the boroughs in the Pittsburgh SMSA, did not seem to affect the ability of the predictor variables to estimate the high per capita expenditures of the two central cities.

The high degree of political fragmentation within the Pittsburgh SMSA may possibly account for the low expenditure level of the suburbs. Due

TABLE 5

"DETROIT COMPARISON" REGRESSIONS: PER CAPITA POLICE EXPEN

No.	SUSA	Y	Y-	E/R	Dist	Co
Detroit						
1.	with central city	.65* (.28)	.21* (.10)	.054* (.008)	-.46* (.09)	5.
2.	without central city	.65* (.28)	.19 (.11)	.054* (.008)	-.45* (.09)	5.
Cleveland						
3.	with central city	.50* (.22)	.58* (.10)	.0072* (.0027)	-.17* (.06)	2.
4.	without central city	.55* (.22)	.47* (.14)	.0065* (.0027)	-.14* (.07)	2.
Memphis-St. Paul						
25.	with central cities	.52 (.28)	.73* (.14)	-.0013 (.0063)	.000 (.095)	-1.
26.	without central cities	.50 (.29)	.60* (.23)	.0001 (.007)	.034 (.109)	-1.
Pittsburgh						
27.	with central city	.55 (.27)	.18 (.12)	.016* (.008)	-.13* (.06)	2.
28.	without central city	.81 (.27)	.12 (.13)	.011 (.007)	-.073 (.052)	4.

* The coefficient is twice its standard error.

pality may seek a "free lunch" by waiting for neighboring municipalities to increase the provision of public goods and services.

The role of spillover benefits probably best explains why the predictor

variables do not explain the high per capita expenditures of Detroit and Cleveland for parks and recreation, but do explain the per capita expenditures of the central city for police and fire protection. Spillover benefits are probably relatively more important for parks and recreation than for police or fire protection. An individual may be able to easily use and thus benefit from a park facility in a neighboring municipality. However, a good police or fire department in a neighboring municipality may provide only limited benefits unless there are extensive mutual aid agreements among local municipalities for police and fire protection. Thus the conclusion is that of the three expenditure functions examined in this study, it is not surprising that the predictor variables do not explain the per capita expenditures of the central city for parks and recreation but do explain the per capita expenditures for police and fire protection.

This conclusion should not be misinterpreted. It does not imply that these central cities do not differ from their respective suburbs. The conclusion is only that the statistical evidence indicates that these central cities come from the same linear relation as their respective suburbs.

Between SMSA's

The question of whether the empirical results of one SMSA can be generalized to the other metropolitan regions is first tested by comparing the "best" explanatory variables for each SMSA.

In only one case do the "best" regressions for two SMSA's employ the same independent variables. This exception is the regression for per capita police expenditures for the Detroit and Cleveland SMSA's in which the independent variables are median family income, per cent of families with incomes under \$3000, employment-resident ratio, and distance from the central city.

A comparison of the "best" regressions for each SMSA reveals that in no case is an explanatory variable significant in all four SMSA's for the same expenditure function.

In some instances the potential significance of an independent variable may not be uncovered by the regression analysis because its variance is too small.

But this rationale can not explain all of the wide divergence in regression results over the four SMSA's. For example, the employment-resident ratio is a more significant explanatory variable in the Detroit SMSA as compared to the other three SMSA's even though the standard deviation for this variable is the smallest for the Detroit SMSA. It follows that a comparison of the "best" explanatory variables for each SMSA leads to the

TABLE 6

"DETROIT COMPARISON" REGRESSIONS: PER CAPIT

No.	SMSA	Y	Y-	E/R
Detroit				
9.	with central city	.94* (.34)	.26* (.13)	.045* (.010)
10.	without central city	.98* (.34)	.29* (.13)	.044* (.010)
Cleveland				
29.	with central city	1.13* (.26)	.55* (.12)	.0089* (.0032)
30.	without central city	1.08* (.27)	.65* (.17)	.0095* (.0033)
Minneapolis-St. Paul				
31.	with central cities	.37 (.28)	.89* (.14)	-.0095 (.0063)
32.	without central cities	.37 (.27)	.75* (.21)	-.0085 (.0062)
Pittsburgh				
33.	with central city	-.15 (.94)	.18 (.14)	.0090 (.0081)
34.	without central city	-.40 (.82)	.13 (.13)	.0048 (.0071)

* The coefficient is twice its standard error.

conclusion that there is great difficulty in generalizing the results. Significant explanatory variables in the Detroit SMSA are often not significant for the other SMSA's.

The generalization of the regression results may be further tested by taking the "best" explanatory variables for the Detroit SMSA and testing them against the other three SMSA's. Examining the "Detroit comparison" regressions, one again concludes that significant explanatory variables

for one SMSA are often not significant for the other SMSA's. Comparison of the four SMSA's is designed not only to ascertain whether a particular explanatory variable is statistically significant in more than one SMSA, but also to examine the numerical value of the regression coefficient in the different SMSA's. This test of the generality of the results also reveals great contrast among the SMSA's. For example, even when the coefficients for the same independent variable are significant in the two SMSA's, the numerical values may be quite different. Consider the "Detroit comparison" regressions for fire protection when the central cities are included. The numerical value of the coefficient for the per cent of families with incomes under \$3000 is .26 for the Detroit SMSA, .55 for the Cleveland SMSA, and .89 for the Minneapolis-St. Paul SMSA. Therefore, a one per cent increase in the percentage of families with incomes under \$3000 would lead *ceteris paribus* to twice as large an increase in per capita expenditures in the Cleveland SMSA as in the Detroit SMSA and over three times as large an increase in per capita expenditures in the Minneapolis-St. Paul SMSA.

The "Detroit comparison" regressions in which the same independent variables are employed for each SMSA permit our applying the Chow test of the generality of the results.⁹ The hypothesis to be tested is whether or not the municipalities from two different SMSA's may be said statistically to come from the same underlying population. If the calculated F ratio is greater than $F_{.05}$, the hypothesis that the municipalities of one SMSA come from the same linear relation as another SMSA is rejected at the 95 per cent level of confidence.

The Chow test of whether or not the municipalities from two different SMSA's are from the same underlying linear relation is examined in two

$${}_9F = \frac{\sum(Y - \hat{Y})^2 - \sum(Y_A - \hat{Y}_A)^2 - \sum(Y_B - \hat{Y}_B)^2}{\sum(Y_A - \hat{Y}_A)^2 + \sum(Y_B - \hat{Y}_B)^2} \cdot \frac{(m+n-2k)}{k}$$

with k , $m+n-2k$ degrees of freedom where

Y = actual value of the dependent variable in the regression which pools the municipalities from both SMSA's

\hat{Y} = estimated value of the dependent variable in the pooled regression

Y_A and Y_B = actual value of the dependent variable in the regressions which include the municipalities from only one SMSA

\hat{Y}_A and \hat{Y}_B = estimated value of the dependent variable in the regressions which include municipalities from only one SMSA

m = number of municipalities in the one SMSA

n = number of municipalities in the other SMSA

k = number of parameters estimated

This F test is applicable so long as $m > k$. If $m \leq k$, the first Chow test is the applicable one. See Gregory C. Chow, *op. cit.* and J. Johnston, *op. cit.*

slightly different models. In the first test, the central cities are included whereas, in the second test, the central cities are excluded. The calculated F ratios by expenditure function for the six combinations of two SMSA's

TABLE 7
"DETROIT COMPARISON" REGRESSIONS: PER CAPITA RECREATION EXPENDITURES

No.	SMSA	Y	Y-	E/R	Const	Std Dev Std Err	F R ²
17	Detroit with central city	.61* (.27)	-.18 (.10)	.050* (.008)	-2.93	3.12 2.06	14.90 .58
18	Detroit without central city	.59* (.26)	-.24* (.09)	.052* (.008)	-2.54	3.11 1.93	17.76 .62
35	Cleveland with central city	.39* (.19)	.21* (.09)	-.0001 (.0025)	-1.98	1.58 1.41	2.61 .24
36	Cleveland without central city	.43* (.18)	.039 (.125)	-.0012 (.0024)	-1.30	1.48 1.33	2.32 .22
37	Minneapolis-St. Paul with central cities	.71 (.43)	.96* (.22)	.0017 (.0098)	-7.01	3.27 2.03	10.37 .63
38	Minneapolis-St. Paul without central cities	.74 (.45)	1.15* (.35)	.000 (.011)	-8.00	2.88 2.09	5.39 .50
39	Pittsburgh with central city	.28 (.59)	.045 (.092)	.0027 (.0047)	-1.26	1.39 1.39	.23 .02
40	Pittsburgh without central city	.13 (.49)	.045 (.077)	.0018 (.0039)	0.07	1.15 1.15	.08 .01

*The coefficient is twice its standard error.

both including and not including the central city are presented in Table 10 and 11.

The major conclusion to be drawn from these tables is that in general the municipalities of one SMSA are not from the same linear relation as the

municipalities of any of the other SMSA's. The statistical results obtained by regression analysis for one SMSA can not be generalized to the other SMSA's. There are some exceptions to this general conclusion. When the municipalities of the Pittsburgh and Cleveland SMSA's are combined with the central cities included, the calculated F ratio for parks and recreation expenditures is less than $F_{.05}$. When the central cities are not included, the calculated F ratio for police protection is also less than $F_{.05}$. Similarly, when the municipalities of the Minneapolis-St. Paul and Pittsburgh SMSA's are included with the central cities, the calculated F ratio for police protection is less than $F_{.05}$. When the central cities are not included, the calculated F ratio for fire protection is also less than $F_{.05}$. These are the only cases in which the hypothesis that the two metropolitan regions are from the same underlying linear relation can not be rejected at the 95 per cent confidence level.

It is important to note that none of the exceptions involve the Detroit SMSA. Nevertheless, it was from the "best" regressions for the Detroit SMSA that the independent variables were selected which were used in the comparison of SMSA's. The "best" regression results for the Detroit SMSA can not be generalized to any of the other three SMSA's. However, the "Detroit comparison" regression results for Pittsburgh can be generalized to Cleveland or to Minneapolis-St. Paul for some of the expenditure functions. But this is not very interesting because the "Detroit comparison" regression results for Pittsburgh are themselves not very interesting.

The generality of the regression results for one SMSA, therefore, may be quite limited. Further empirical work is needed to determine what factors account for the different expenditures patterns in the different SMSA's. To what extent are the differences due to differences in the assignment of expenditure responsibility between the state and local levels of government? To what extent are the differences due to differences in the degree of political fragmentation within each SMSA? To what extent are differences due to differences in the pattern of population growth and change?

The examination of per capita local government expenditure patterns in each of four metropolitan regions does not provide sufficient observations to answer the above questions. The data are too limited. For example, whether the Pittsburgh SMSA differs from the other metropolitan regions because of the higher degree of political fragmentation or because of the greater prevalence of municipalities with declining populations.

TABLE 8
CHOW TEST FOR CENTRAL CITY

	Police			Fire		
	F	F.05	F.01	F	F.05	F.01
<u>Best Regressions</u>						
<u>Detroit</u>	0.54	4.16	7.53	1.91	4.16	7.53
<u>Cleveland</u>	1.12	4.26	7.82	0.40	4.26	7.82
<u>Minneapolis-St. Paul</u>	0.65	3.68	6.36	2.21	3.63	6.36
<u>Pittsburgh</u>	10.96*	4.20	7.64	4.96*	4.18	7.64
<u>Detroit Comparison</u>						
<u>Detroit</u>	0.54	4.16	7.53	1.91	4.16	7.53
<u>Cleveland</u>	1.12	4.26	7.82	0.73	4.26	7.82
<u>Minneapolis-St. Paul</u>	0.29	3.68	6.36	1.60	3.68	6.36
<u>Pittsburgh</u>	12.72*	4.20	7.64	10.79*	4.20	7.64

*F is greater than F.05.

TABLE 9

THE RESIDUAL AND STANDARD ERROR FOR THE PER CAPITA
EXPENDITURES OF THE CENTRAL CITIES

No.		Residual (Actual - Estimated)	Standard Error
<u>"Best" Regressions</u>			
<u>Police</u>			
2	Detroit	\$1.72	\$2.02
4	Cleveland	2.82	1.48
6	Minneapolis	1.91	1.08
6	St. Paul	1.71	1.08
8	Pittsburgh	6.99*	1.70
<u>Fire</u>			
10	Detroit	-3.89	2.43
12	Cleveland	1.82	1.73
14	Minneapolis	1.52	1.26
14	St. Paul	3.92*	1.26
16	Pittsburgh	4.84*	1.78
<u>Parks and Recreation</u>			
18	Detroit	5.05*	1.93
20	Cleveland	2.52*	0.76
22	Minneapolis	-1.77	2.09
22	St. Paul	-2.59	2.09
24	Pittsburgh	4.13*	1.26
<u>"Detroit Comparison" Regressions</u>			
<u>Police</u>			
2	Detroit	1.72	2.02
4	Cleveland	2.82	1.48
26	Minneapolis	1.69	1.31
26	St. Paul	1.36	1.31
28	Pittsburgh	7.71*	1.87
<u>Fire</u>			
10	Detroit	-3.89	2.43
30	Cleveland	-2.61	1.80
32	Minneapolis	0.61	1.19
32	St. Paul	3.39*	1.19
34	Pittsburgh	7.14*	1.88
<u>Parks and Recreation</u>			
18	Detroit	5.05*	1.93
36	Cleveland	4.09*	1.33
38	Minneapolis	-1.78	2.09
38	St. Paul	-2.60	2.09
40	Pittsburgh	4.77*	1.15

*The residual is twice the standard error of estimate.

TABLE 10
CHOW TEST FOR TWO COMBINED SMSA'S WITH CENTRAL CITIES

SMSA and Function	Cleveland			Minneapolis-St. Paul			Pittsburgh		
	F	F .05	F .01	F	F .05	F .01	F	F .05	F .01
Detroit									
Police	8.54	2.38	3.37	15.54	2.40	3.41	13.13	2.37	3.34
Fire	2.84	2.38	3.37	6.94	2.40	3.41	10.54	2.37	3.34
Park and Recreation	12.77	2.53	3.66	6.88	2.56	3.72	11.14	2.51	3.63
Cleveland									
Police				6.38	2.44	3.50	3.48	2.39	3.39
Fire				7.84	2.44	3.50	5.73	2.39	3.39
Park and Recreation				7.26	2.58	3.79	1.14*	2.54	3.68
Minneapolis-St. Paul									
Police							1.68*	2.42	3.44
Fire							3.49	2.42	3.44
Park and Recreation							14.86	2.56	3.74

*F is less than F .05.

TABLE 11
CHOW TEST FOR TWO COMBINED SMSA'S WITHOUT CENTRAL CITIES

SMSA and Function	Cleveland			Minneapolis-St. Paul			Pittsburgh		
	F	F .05	F .01	F	F .05	F .01	F	F .05	F .01
Detroit									
Police	8.66	2.38	3.37	28.17	2.42	3.44	15.85	2.37	3.34
Fire	2.69	2.38	3.37	6.94	2.42	3.44	13.68	2.37	3.34
Parks and Recreation	15.82	2.54	3.68	5.79	2.56	3.74	13.74	2.52	3.65
Cleveland									
Police				5.34	2.46	3.54	1.71*	2.40	3.40
Fire				7.90	2.46	3.54	6.10	2.40	3.40
Parks and Recreation				5.78	2.61	3.83	0.91*	2.55	3.70
Minneapolis-St. Paul									
Police							1.31*	2.44	3.48
Fire							1.47*	2.44	3.48
Parks and Recreation							8.91	2.58	3.75

*F is less than F .05.

IV

Conclusions

THE PREDICTOR VARIABLES which explain the variation in expenditures among the suburbs can also explain the per capita expenditures of the central cities for the Detroit, Cleveland, and Minneapolis-St. Paul SMSA's, but not for the Pittsburgh SMSA. This does not imply that these central cities do not differ from their respective suburbs. The conclusion is that the statistical evidence indicates that these central cities come from the same underlying population as their respective suburbs.

The generality of the regression results for one SMSA may be quite limited. Significant explanatory variables for one SMSA are often not significant for the other SMSA's. In general, the municipalities of one SMSA are not from the same linear relation as the municipalities of any of the other SMSA's. Further empirical work is needed to determine what factors account for the different expenditure patterns in the different SMSA's.

Washington, D.C. 20220

U.S. Foreign Travel Spending

UNITED STATES RESIDENTS spent \$6.2 billion on foreign travel in 1970—15 per cent more than in 1969; this total represents payments to U.S. and foreign carriers as well as spending in foreign countries.

Dollar earnings of foreign countries from U.S. travelers reached \$5.2 billion in 1970, an increase of 16 per cent over 1969. Of this amount almost \$4 billion was spent for food, lodging, and transportation within foreign areas, and \$1.2 billion was paid in passenger fares to foreign sea and air carriers for transocean transportation.

In 1970 foreign visitors spent \$2.7 billion to see the United States, 14 per cent more than in 1969. This total includes \$375 million paid to U.S. carriers for passenger fares to and from the United States. Thus the U.S. deficit on foreign travel amounted to \$3.5 billion in 1970, a deterioration of about \$100 million from 1969.

The highest expenditures of U.S. residents traveling in foreign countries were in Western Europe (\$1,310 million), Canada (\$1,049 million), and Mexico (\$720 million). The highest expenditures in the United States were by visitors from Canada, Mexico, Western Europe, and the West Indies and Central and South America. [From the U.S. Department of Commerce.]

Economics Curricula in Black Colleges and Universities

By R. GRANN LLOYD

A LARGE and rapidly increasing proportion of Black people today are development-minded. Non-Whites whose lives have been bruised by deprivation and stagnancy for hundreds of years are in uncompromising resistance to the abusive discrimination, the disease and limited health care, the inadequate housing, the poor education, the pervasive unemployment and underemployment, the general lack of opportunity, and the dominance of White people that have historically characterized their existence. Conversely, most, if not all, of White society is obligated to the quest for growth. Thus the heightened aspirations of almost the whole of mankind for economic, political, and social advancement is not only unprecedented, but the essence of the current revolt against the *status quo*.

The impetus to the current societal revolt is development. Whereas the concept means different things to different people, economists tend to associate development with the modernization of economic instruments and processes and the achievement of economic growth. And yet, as a result of rising expectations, all people and especially Black people, ascribe to development a far more comprehensive meaning than economic advancement. It is the pursuit of dignity, opportunity, recognition, social and political relevance, and status. Hence, it seems impractical to attempt an analysis of all Black higher education institutions, or segments of them, in an exclusively economic setting in view of the limitations established by other societal goals.

The economics curricula in many of the Black colleges and universities in the United States are the inadequate products of an age characterized by myopic denial and limited occupational opportunity. Others, however, are modern arrangements for developing abilities and skills in economics at a really high level and consciously committed to the pursuit of economic knowledge, the appreciation of economic achievements and processes and the solving of economic problems.

I

A STUDY of the economics curricula in 88 Black degree-granting colleges and universities yielded a 57.9 per cent response. The respondents repre-

sented 51 Black higher education institutions located in 16 states and the District of Columbia. The findings of this study seem to indicate the following:

Although only 37.2 per cent of the nation's Black degree-granting colleges and universities have separate departments of economics, 58.8 per cent of them offer a major in economics. The number of credit hours required for a major in economics at these institutions varies from 24 to 36 semester hours and from 30 to 45 quarter hours.¹ Furthermore, it seems that more than half or 52.9 per cent of the Black colleges and universities in the United States offer a minor in economics. The number of credit hours required for a minor in economics at these institutions varies from 18 to 21 semester hours and from 21 to 30 quarter hours. Incidentally, the number of courses in economics offered at these institutions varies from one course at Elizabeth City (N.C.) State College to 40 courses at Howard University. The accumulated data suggest that:

Slightly more than 45 per cent (45.1 per cent) of the nation's Black colleges and universities offer less than 10 courses in economics.

More than a third, or 37.2 per cent, of the Black colleges and universities in the United States offer from 10 to 15 courses in economics.

From 16 to 20 courses in economics are offered at 11.8 per cent of the nation's Black higher education institutions.

Only 3.9 per cent of the Black colleges and universities in this country offer from 21 to 25 courses in economics.

The data seem to suggest further that during the past five years numerous changes have been made in the economics curricula of three-fourths, or 74.5 per cent, of the Black colleges and universities in the United States. For example, 15.7 per cent of them added statistics to their economics curriculums; 11.7 per cent of them added macro-economic theory and the history of economic thought; 9.8 per cent of them added courses in economic development; 7.9 per cent of them added econometrics, intermediate economics, and international economics; 5.9 per cent of them added micro-economic theory, the economics of poverty, managerial economics, and general economic theory. Moreover, numerous other courses have been added to the economics curricula of the nation's Black colleges and universities during the past half decade, including Introduction to price theory, quantitative methods, economic development of the South, mathematical economics, economic development of Africa, economic status of Blacks, and others. In addition, the data seem to show that during the past five years 15.7 per cent of these

¹ At least one Black college requires 55 quarter hours of course work in the field for a major in economics.

Black higher education institutions established major programs in economics and another 9.8 per cent of them added a minor in economics to their curricula offerings. Incidentally, it seems especially significant to note that only three Black universities offer graduate programs in economics that lead to a master's degree.²

That the foregoing skeletal presentation concerning the economics curricula in Black colleges and universities indicates weaknesses in course offerings, programs, and organization cannot justifiably be denied. However, much progress has been made in recent years. A quarter of a century ago, better still as late as fifteen years ago, very few Black higher education institutions offered major programs in economics and fewer still had separate economics departments. Slowly, but steadily—understandably so but still perhaps too slowly—these institutions are expanding the curricula options available to their students.

It must never be forgotten that much, perhaps most, of the curricula inadequacy and curricula misdirection in Black colleges and universities in the United States are the results of White racism and historic limitations on practical occupational choice and employment opportunities for American Blacks. Actually, the most serious weaknesses of most Black colleges and universities, in curricula and otherwise, stem from the uncomplicated fact that they are run by White people for the benefit of White people. And, as Myrdal has pointed out, American White people "have merely kept Negro education poor and bad."³

II

REVOLUTIONARY CHANGES in our society during the past fifteen years have created new opportunities and new career challenges for all Americans. Therefore, as we look to the future, it seems desirable to raise certain questions which appear to be fundamental, to wit:

- (1) What are the principal sources of demand and employment opportunity for Black people with competence in the field of economics?
- (2) What are the essential requirements Black people must meet to qualify for these employments and what economics courses, educational programs, and experiences are absolutely essential to the necessary competence?
- (3) Which Black colleges and universities establish courses and/or programs in Black economics?

² The findings of this study seem to establish that only Atlanta University, Howard University, and Prairie View State University offer master's degree programs in economics.

³ Gunnar Myrdal, *An American Dilemma* (New York: Harper Bros., 1944), Vol. I, p. 896.

- (4) What changes in their economics curricula, if any, should Black colleges and universities make in order to produce graduates capable of competing satisfactorily for present and emerging employment opportunities for persons well-prepared in economics?

What are the principal sources of demand and employment opportunities for Black people with competence in the field of economics?

There has been a dramatic increase in the employment opportunities for professional economists since the end of World War II. Employment opportunities for economists prior to that time were restricted largely to the academic community. However, many desirable openings and opportunities in government and business have been developing for economists during the past fifteen years.

Many business organizations, especially the larger corporations, in all areas of industrial activity now have their own economics departments. Practically all agencies of the federal government (*e.g.*, the Department of Agriculture; the Department of Defense; the Department of Health, Education, and Welfare; the Department of Housing and Urban Development; the Department of Labor; the Securities and Exchange Commission) have continuing need for the services of well-prepared economists. On the state and local levels of government budget offices—departments of finance and taxation, planning commissions—now often employ trained economists. In addition, many attractive employment opportunities are available in the academic world for persons with advanced degrees, especially the doctorate in economics.

The general demand for economists seems to be a combination of business, government, and academic demands. It seems logical to expect a very strong demand for Black graduates in economics from all three sources over the foreseeable future. In all three cases it is quite probable that entry into an organization as an economist may ultimately lead to employment opportunities in administrative and policy-making positions. Therefore, young Black students who are interested in executive work in business or government or educational administration should be encouraged to consider seriously a career in economics. There also seems to be some demand developing for Black people with competence in economics in banking, economic research, consulting firms, and other areas.

Probably the most instructive indication of the kinds of employment available to economists is to be found in the report on "Studies of the Structure of Economists' Salaries and Income" published by the American

Economic Association.⁴ The report shows that (1) 45 per cent of the respondents to a questionnaire used by the investigators were teaching, (2) about a third were in business, and (3) one-eighth of the responding economists were employed by the federal government. Since all of these avenues of employment are now increasingly available to Black people, it seems logical to expect the sources of new employment opportunities in the future to become less disproportionate for Black people with competence in economics in relation to Whites.

Let us assume that in the decade immediately ahead the nation will seek to satisfy its manpower needs and to implement its national goals most efficiently in such areas as agriculture, area redevelopment, consumer expenditures, education, health, housing, international aid, manpower training, national defense, natural resources, private plant and equipment, research and development, social welfare, space, transportation, and urban development. Then we cannot continue the present practices of discrimination based on race and color, denial of equal opportunity for education and vocational development, and callous disregard for the human personality of minority group members without thwarting—by creating crippling manpower shortages—the nation's efforts to implement its goals and to solve its urgent problems. Hence, as we look to the future we may expect that long strides will be taken toward solving the major problems besetting American society today—such as racism, inadequate housing, unemployment, unequal educational opportunity, urban decay, air and water pollution—as they all come within the aforementioned areas. Thus racial discrimination in employment should continue to lessen, new employment opportunities for all of our people continue to emerge, and the manpower demand continue to be based more and more on competence alone.⁵

III

UNDERGRADUATE ECONOMICS MAJORS tend to find themselves competing in the same job market as liberal arts majors. Since undergraduate programs in economics seem to be of little direct use to prospective employers, Black colleges and universities probably should encourage their economics majors to pursue graduate degrees in the field. Whereas there are few

⁴ Arnold N. Tolles and Emanuel Mellichar, "Studies of the Structure of Economists' Salaries and Income," Supplement to the *American Economic Review*, December 1968, p. 17.

⁵ Leonard A. Lecht, *Manpower Needs for National Goals in the 1970's*, New York: (Frederick A. Praeger, 1969), p. 7 and *passim*.

that involve work in economics *per se*, there are slightly more openings for persons with master's degrees in economics.

There is a great demand for Black people with the doctorate degree in economics for university teaching and other positions. Indeed, the market for Black personnel in economics is growing rapidly with the peak apparently not yet in sight. Meeting this growing demand is possible only by the production of competent graduates who must come very largely from Black colleges and universities. In this connection it seems significant to note that the problem of teaching economics effectively has been a concern of the American Economic Association for many years.

Several American Economic Association committees studied the problems involved in teaching economics in higher education institutions in the early 1950s and published their reports in the *American Economic Review*. Although the Association's standing Committee on Economic Education is of many years duration, until almost a decade ago its primary function was arranging a session on the teaching of economics during the annual meeting. In 1963 the Committee was reorganized, reduced in size, given an action orientation, and assigned the task of developing a program which would encourage better teaching of economics by attracting professional attention to that task. The Kazanjian Foundation gave the Committee a grant in 1965 to study experimental teaching of basic economics in the colleges. An evaluative summary of the thirty educational experiments reported by the various economics departments responding to an invitation to submit such information, was prepared by Bernard F. Haley and published in the May 1967 issue of the *American Economic Review*.⁶

What are the essential requirements Black people must meet to qualify for these employments and what economics courses, educational programs, and experiences are absolutely essential to the necessary competence?

The educational requirements should not be any different for Black persons aspiring to employment involving the work of an economist than for anyone else. Therefore, to qualify as a professional economist the Black student should follow a basic course of study including micro and macro-economic theory at the principles and intermediate levels, since this is the key to the whole field. Indeed, one who has not mastered the theory cannot deal satisfactorily with the analysis.

⁶ See also Bernard F. Haley, *Experiments in the Teaching of Basic Economics*, Joint Council on Economic Education, 1967; *American Economic Review*, May 1952, pp. 697-776; May 1962, pp. 474-96; May 1965, pp. 549-80; Supplements to the *American Economic Review*, December 1950 and March 1963.

Like all other students in the field, the Black student of economics should attempt to acquire a good foundation in the liberal arts and a thorough grounding in mathematics. Whereas precise courses are probably not too important the prime essentials for students planning to do graduate work in economics are (1) a good knowledge of mathematics through the calculus and (2) economic theory, both micro and macro. These are imperative.

Economics is a technical subject, but it is also a humanist one. Black colleges and universities should devise curricula in economics which develop both the necessary technical skills and the broad social reference that gives the subject a meaning that is more than purely vocational. Moreover, these institutions should provide adequate preparation for those students who show promise as future leaders in research in economics to develop their potential in this area.

The economics programs in colleges and universities should give students not only a clear understanding of the way the economic process operates, but a viable way of thinking about economic issues as well. In order to provide prospective leaders in economic research with a professional economics orientation and point of view, somewhere along the line colleges and universities must expose them to that abstract, analytic, and rigorous type of economics which symbolizes the essence of the profession. In the process the students must master the advanced tools of economic analysis, a reading competence in one or more foreign languages, a substantial amount of mathematics, and the fundamentals in the social sciences and humanities.

The potential leaders in research in economics must begin early to acquire a firm knowledge and meaningful understanding of the known facts and ideas in their special discipline. Otherwise, they will be severely handicapped in searching for new knowledge. A leader in economic research must be a good economist—well grounded in the subject-matter of economics; able to analyze trends; capable of studying relationships; proficient in diagnosis, prognosis, and prescription—with the ability to roll back the boundaries of ignorance and human error and replace them with new principles and/or new knowledge.

There appears to be no requirement or type of preparation that is especially necessary to prepare Black personnel for basic employment in business, education, government, and other areas involving the work of an economist. Simply specifying courses does not focus on either their quality or their specific contents. Prospective employers seem to be less interested in recruiting a person who has completed many courses at the

undergraduate level, even if such courses are significantly related to their operations, than they are in employing a bright, articulate person who has skills in dealing with his subject analytically and in communicating clearly and succinctly. Black people have experienced a void in supplementary business and economic experiences basic to formal economic education. To fill this void, perhaps Black colleges and universities should place more emphasis on business internship programs and cooperative work-study programs.

Should Black colleges and universities establish courses and/or programs in Black economics?

This question is at the center of much controversy today. Any position one takes on this matter is likely to bring sharp repercussions. Nevertheless, there is no such thing as Black economics any more than there is Black chemistry or Black mathematics or Black physics. The theoretical base of economics is color-blind and amoral. If economics is indeed an art and a science, it should be made applicable to all situations and conditions and not be confined to any spectrum of color bias or opinion.

However, it must be vigorously asserted that the basic thrust of economics as taught in the overwhelming majority of the nation's colleges and universities throughout the annals of American higher education has been lily-White and upper middle class. In examining in the classroom the production, exchange, distribution, and consumption of goods and services the principles of economics have not been applied to all people and societies alike. In dealing with economic problems and situations somehow the examples and illustrations used have practically always been White, the institutions involved affluent, and the sources of assistance and control White. At the same time, however, it is questionable whether courses in Black economics can be intellectually justified. The development of such courses would probably represent non-optimal use of scarce resources.

Perhaps a more practical approach would be the application of economic analysis and statistical techniques to the understanding of the problems of the Black community. Optimum use of such analysis requires identification of manipulatable levers that will contribute to eliminating income inequality and to increasing per capita income. Basic to this area are such subjects as the economics of discrimination, protectionism, public utility regulation, the shifting incidence of taxation and much of the literature on economic development. Effective courses of this kind would not only increase the meaningfulness of higher education for Black students but could become part of the core of a program to prepare highly motivated

and intellectually able Black students to attack the problems of poverty and inequality in Black communities. The need for such people is probably at least as great as the need to increase the supply of doctorates in economics.

If economics is a body of concepts and principles used to analyze behavior, Black colleges and universities might profitably incorporate the economic aspects of Black America in institutionally oriented courses in economics such as labor economics, regional economics, agricultural economics, urban economics and economic growth. The Black higher education institutions might profitably offer such courses as the economics of the ghetto, the economics of discrimination, and the economics of poverty.

One cannot adequately study the economics of the Black community without using economic tools unless the subject degenerates into ideology. For example, the theory of international trade in which the goods markets are joined but the factor markets are not, is an effective means of understanding the urban ghetto. Furthermore, one cannot analyze the Black community as a non-competing group without understanding the theory of enclaves, colonies, dual economies, and so forth.

The thing to avoid is establishing either courses or programs called Black economics which are not economics. Black colleges and universities will do a disservice to their students if they offer courses which only give them a rhetoric with which to express their dissatisfactions with society and do not provide them with the effective tools of scientific investigation of society's deficiencies. Black economics is probably neither conceptually sound nor practically workable. Furthermore, it may very well be the cynical gesture that diverts effort and brains away from the indispensable exposure to, and involvement in, the total society where true power and financial reward are to be found. Indeed, the more economically depressed a group is, the more important it is for that group to understand the basic principles of economics. Economics can serve the aspirations of Black Americans well and it would be unfortunate if the discipline were not used effectively for this purpose.

Lest they delude their students, Black colleges and universities must take a realistic view of the stubborn and irreducible imperatives of a higher education: intellectual discipline, technical competence, and problem solving ability at a high level. At a time when our society is attaching more and more significance to a highly-developed intellect and technical skills, these institutions cannot afford to allow their students to enter the outside world ill-equipped to compete with other college graduates on an equal level of excellence because they were allowed to languish under the

sheltered canopy of restricted and devitalized economics curricula. Unless Black colleges and universities recognize that their economics curricula must give their students the same things that the economics curricula of the non-Black colleges and universities give their students, they will reflect an advanced degree of academic and intellectual moribundity and doze off into a prolonged period of respectable decay and innocuous desuetude.

What changes in economics curricula, if any, should Black colleges and universities make in order to produce graduates capable of competing satisfactorily for present and emerging employment opportunities for persons well-prepared in economics?

Perhaps the most important need in Black colleges and universities is to raise the quality of economics instruction and to stress the universal relevance of economic theory. "Integrity" of economics course content, including proper testing to measure progress, all the way to awarding meaningful degrees, is probably as important as anything. More emphasis should be placed upon the creation of economic models for less-developed people, involving doctrines related to the accumulation of capital in both the short-run and the long-run.

The economics curricula in Black colleges and universities should not be significantly different from the economics curricula in non-Black higher education institutions whose standards meet programs and the criteria of the economics profession. Hence, a solid, rigorous, quantitatively-oriented curriculum is essential. It should include adequate work in mathematics, statistics, and economic theory taught at a relatively high level. These institutions should prepare their majors to do economic planning for development of the ghettos by fostering their skills in doing research, analyzing data, using computers, and administering programs. They must somehow instill in some of their students a dedication that will make them willing to remain and work in the ghettos.

IV

IN SUMMARY, the changes in the economics curricula that Black colleges and universities should institute ought to emphasize analytical competence, the ability to communicate clearly in both oral and written form, and some of the "hot" or more exotic areas of the discipline, such as computer programming, economic planning, gaming models, forecasting, probability, simulation, and the like. All of these topics could be profitably incorporated into the economics curriculum not only to enliven the subject-matter, but also to assist in placing Black economics students closer to the frontiers

Dr. Johnson was best known for his long association with the New School for Social Research in New York. He joined a group of *New Republic* and Columbia friends in its founding as the 1919 version of the alternative university; alternative, that is, to Nicholas Murray Butler's Columbia.¹ They included Mrs. Thomas W. Lamont, Mrs. Learned Hand, John Dewey, James Harvey Robinson, Charles A. Beard, Thorstein Veblen and Wesley Clair Mitchell. Dr. Johnson took over its direction from a managing committee in 1921 and was its director and later president until retirement in 1945 (and its active president emeritus until 1964). He built the New School into the country's first university for adults. In this, as he always emphasized, he had the invaluable collaboration of devoted men and women, notably of his longtime assistant and later associate, Clara W. Mayer.

Out of his work in behalf of refugee social and behavioral science scholars, fugitives from Nazism and fascism, developed the famous University in Exile, basis of the New School's Graduate Faculty of Political and Social Science. His collaboration with Governor Thomas E. Dewey brought about the adoption of the New York State law banning discrimination in employment on account of race, color, creed, national origin, age or sex, the first of its kind in the United States.

Almost from 1927, when I first attended classes at the New School, Alvin Johnson was a beloved friend and guide. He sponsored the *American Journal of Economics & Sociology* when it began in 1941 and until his final retirement in the mid-60s contributed occasional editorials,² motivated as much by the keen interest he always maintained in those whose lives he touched as by his devotion to the causes of progressive American democracy and of cooperation and synthesis in the social sciences. Alvin Johnson was a trail blazer, ever giving of himself for those who would come after. And much he had to give.

WILL LISSNER

¹ What led to its founding is worth recalling. Nicholas Murray Butler, president of Columbia University (whom I later was to know as friend and benefactor) was an ardent supporter of the allied cause. This estranged Charles A. Beard, James Harvey Robinson and Wesley Clair Mitchell, and so they quit Columbia for the New School. In the 30s I came to know Dewey and Mitchell and heard their versions of the episode (neither Mr. Butler nor his friends mentioned it, as far as I can remember, when I was working on his tabloid biography but he did acknowledge in discussing the period that "tempers ran high" during it.) Mr. Butler soon repented his uncharacteristic intolerance and made up with his friends, inducing Mitchell and Robinson to return to Columbia. But J. McKeen Cattell, Beard and another whose name escapes my memory remained unreconcilable.

The reconciliation all but robbed the New School of its reason for being but Johnson was undaunted. It should be remembered that in 1919 the Socialist party's labor college, the Rand School of Social Science, was at its peak, and the anarchists had a prestigious alternative university headed, or soon to be headed, by no less a scholar than Will Durant. The New School survived them all.

² Harold A. Allen equates his total output, besides his economics treatise, with some million non-merchandise collections of short pieces, an autobiography, three collections of editorials and more than a thousand articles in various publications.

Discrimination and the Income of Non-White Males*

By DAVID W. RASMUSSEN

IN RECENT YEARS economists have made many attempts to discover those factors which determine the income of non-Whites. Since the appearance of Gary Becker's *The Economics of Discrimination*,¹ numerous articles have analyzed the effect of discrimination on the economic well being of non-Whites.² Discrimination is frequently held to be an important factor, although empirical estimates of its impact on income are generally speculative. The purpose of the present paper is to provide a quantitative estimate of discrimination's impact on the relative income of the non-White men.

The simplest way to quantify the effect of discrimination is to assume that it causes all differences between the incomes of Negroes and Whites. This naive approach may not be altogether inappropriate since these income differences could result from direct and indirect discrimination over the past 300 years.³ However, this kind of estimation procedure may gloss over many factors that could have important implications for public policy. In the analysis that follows an attempt is made to isolate all the important non-market factors that influence the relative income of non-Whites. The extent to which these represent indirect or past discrimination against non-Whites is a question beyond the scope of this paper.

I

The Impact of Discrimination

GARY BECKER ESTIMATED the quantitative impact of discrimination on the relative income of non-whites in *The Economics of Discrimination*. He assumed a Cobb-Douglas production function for separate non-White and White economies and estimated the capital (physical and human)/labor ratio for the two groups. In the absence of discrimination, the capital intensive White economy would export capital to the non-White sector

* This work was financially assisted by a fellowship under a grant to Washington University by the Economic Development Administration, U.S. Department of Commerce. Project #OER 036-G-66-4.

¹ Chicago: University of Chicago Press, 1957.
² J. M. Becker, "An Economic Analysis of Discrimination and Unemployment," *American Economic Review*, 55 (December, 1965), pp. 1077-97 and Elton Rayack, "Discrimination and the Occupational Progress of Negroes," *Review of Economics and Statistics*, 43 (May, 1961), pp. 209-14.

³ This assumes that there are no differences in innate ability and that any differences in motivation are induced by the environment.

and import non-White labor until the marginal products of capital and labor in the two economies are equal. Based on the assumption that Whites have 150 times more capital than non-Whites, Becker concludes that the non-White per capita income would be about 66 per cent of Whites in the absence of discrimination. He estimates that discrimination lowers the actual income ratio by 13 per cent, to .57.

The principal weakness of Becker's approach is that the assumed size of the White capital stock relative to that of non-Whites is difficult to justify since "... (it) was arrived at essentially by guess."⁴ In order to avoid making such rough approximations of reality, an alternative measure based on Becker's concept of the discrimination coefficient is employed below. With this method, the earnings of non-Whites are assumed to be equal to the product of their productivity (P_n) and one minus the discrimination coefficient (d). White earnings are assumed to be equal to their productivity (P_w). Hence, the relative earnings of non-Whites (Y_n/Y_w) equals $P_n(1-d)/P_w$. Since the values of Y_n and Y_w are readily available, only an estimate of relative productivity need be generated to solve for the discrimination coefficient.

The estimate of relative productivity is based on a comparison of age-education distributions by race, the variables usually thought to be the primary determinants of productivity. The 1960 mean earnings in the United States for the ij th age-education cell is used to weight the corresponding proportion of non-White and White males.⁵ Summing over all age and education cells yields an expected income or "productivity" measure for non-Whites and Whites. In the absence of discrimination, *ceteris paribus*, the actual income ratio (Y_n/Y_w) should equal the productivity ratio (P_n/P_w).

The calculated values of the discrimination coefficient for three geographic areas are presented in Table 1. However, before the unadjusted discrimination coefficient can be properly assessed, three basic questions must be clarified. First, to what extent do differences in innate ability between the races account for the relatively low income of non-Whites? Secondly, what is the impact of possible differences in the taste for leisure on the income ratio? Thirdly, what portion of the discrimination coefficient reflects differences in the quality of education between the races?

⁴ Becker, *The Economics of Discrimination*, p. 20.

⁵ The age education matrix has five age brackets (18 to 24, 25 to 34, 35 to 44, 45 to 54 and 55 to 64) and six education classes (0 to 7, 8, 9 to 11, 12, 13 to 15 and 16 or more). The earnings data are found in *Occupation by Earnings and Education*, U.S. Census of the Population, Final Report PC(2)-7B. The age-education distributions are found in Table 173, *1960 Census of the Population*, Vol. II. The calculated values of P_n/P_w are .821, .825 and .796 for the U.S., North and South respectively.

Table 1

THE DISCRIMINATION COEFFICIENT ADJUSTED FOR DIFFERENCES IN
TASTES FOR LEISURE AND QUALITY OF EDUCATION, BY REGION, 1960

<i>Cumulative Adjustment</i>	<i>Total U.S.</i>	<i>Non-South</i>	<i>South</i>
Unadjusted	.34	.20	.43
Tastes for Leisure	.32	.18	.41
Quality of Education	.24	.10	.32

II

Innate Ability and Environment

IT HAS BEEN ARGUED, sometimes explicitly but more often implicitly, that non-Whites have less innate ability than Whites. By all conventional measures, non-Whites perform at a lower level than Whites at all educational levels. Whether these differences in performance are due to variation in inherent ability or environmental factors is, of course, the crucial question.

Milton Schwebel suggests three basic determinants of educational achievement: inherent ability at birth, biological factors and environmental influences.⁶ Biological considerations include such phenomena as undetected sight and hearing impediments and nutritional deficiencies while a crucial environmental factor is the quality of intellectual stimulation in the pre-school years. Unfortunately, the relative importance of these determinants is difficult to analyze empirically. Since both biological and environmental deficiencies appear to be inversely related to the level of income, it is likely that these factors work to lower the relative scholastic achievement of non-Whites. In the absence of a reliable scientific analysis of racial differences in ability, it is assumed that innate ability is randomly distributed among the races and that other determinants are responsible for variations in scholastic achievement.

Differences in the taste for leisure between non-Whites and Whites could be an important determinant of the income ratio. Non-Whites may prefer part time employment or voluntarily quit full time jobs more frequently because they value leisure more highly than do Whites. However, it is difficult to quantify differences in the taste for leisure since other factors also influence the duration and/or frequency of employment. Non-Whites may quit jobs more frequently in spite of preferences for leisure that are identical to those of Whites. In particular, higher quit rates (and/or lower intensity of job search) could be due to real or imagined abuse and discrimination by White labor or the lack of knowledge about job opportunities.

⁶ Milton Schwebel, *Who Can Be Educated?* (New York: Grove Press, Inc., 1968).

In *The Economics of Discrimination*, Gary Becker argued that differences in the taste for leisure are probably of small magnitude.⁷ However, the folklore of modern business tells of many jobs that remain unfilled because unskilled labor with the habits of promptness and regularity cannot be found to fill them. The question is, of course, what are the relative strengths of White discrimination, non-White preferences and lack of information in determining the lower frequency of work experienced by non-Whites. For the purpose of this study it is assumed that discrimination by White capital and labor are not in any way responsible for the lower frequency of employment of non-Whites. This assumption, of course, may cause the estimated discrimination coefficient to be biased downward.

The maximum feasible frequency of employment (weeks worked per year) for non-Whites is assumed to be equal to the actual White weeks worked distribution. The weeks worked distribution is divided into two classes: full time (50–52 weeks) and part time (less than 50 weeks) employment. For the United States in 1960 the non-White/White income ratio for those employed full time was .644 while the corresponding figure for those working fewer than 50 weeks was .507.⁸ The non-White/White income ratio for 1960 is the proportion of non-Whites working full time (.398) times .644 plus the proportion working part time (.602) times .507, or .561. It is assumed that the proportion of non-Whites employed full time could equal that of Whites if differences in preferences and information did not exist and that they would be employed at 1960 levels of relative income. Under these conditions, the income ratio would be calculated with the White proportions of full and part time employment: .548 and .452 respectively. The resulting income ratio is .582, a 3.7 per cent increase over the actual figure. This percentage increase is applied to the income ratio and the discrimination coefficient is recalculated. The same procedure is applied to the regions⁹ and the results of these calculations are presented in Table 1. These estimates represent the maximum possible impact of differences in the taste for leisure between non-Whites and Whites.

⁷ *Op. cit.*, p. 95.

⁸ These data are calculated from U.S. Department of Labor, *The Negroes in the United States*, (Washington, D.C.: Government Printing Office, 1966), Table IIIA. 3.

⁹ It is assumed that the percentage increase in the income ratio for the U.S. holds for each of the regions since income by weeks worked, race and region is unavailable.

III

The Quality of Education

THE REMAINING FACTOR that may distort the estimated discrimination coefficient is the difference in the quality of non-White and White education. The following measure of differences in the quality of education rests on three basic assumptions. First, it is assumed that the differences in score on the Armed Forces Qualification Test (AFQT) are a result of variations in the quality of education when the years of schooling are identical.¹⁰ Secondly, it is presumed that the skills required for the test are the same qualities that are rewarded in the private sector of the economy. Finally, the variations in examinations score by race for the 19-21 age group are assumed to reflect differences in educational quality for the entire age distribution.

The average AFQT score of Whites exceeded that of non-Whites by as little as 6.6 percentile points for the 0-7 years of schooling class and as much as 28.0 points for high school graduates.¹¹ The weighted average score differential for the United States is 15.25, while the corresponding figures for the non-South and South are 16.14 and 13.56 respectively.¹² Fortunately the variations in earnings that are expected from these differences in the quality of education can be estimated from the work of Hansen, Weisbrod and Scanlon. Using the multiple regression technique to control for factors such as years of schooling, on the job training, age, marital status, and region, they found that a one point increase in AFQT score raises annual earnings by \$24. The product of the average AFQT differential and \$24 shows that non-White income in the total U.S. would be \$366 greater if no differences in educational quality existed. This amount is added to the level of non-White income adjusted for variations in the taste for leisure. The income ratio is recalculated and the final discrimination coefficient for the U.S. (.24) is presented in Table 1. The same procedure was used to determine the discrimination coefficient in the non-South (.10) and South (.32).

¹⁰ W. L. Hansen, B. Weisbrod and W. Scanlon used this test "As a broad measure of learning (either in or out of school), reflecting student ability, motivation, school quality and home environment . . ." in "Schooling and Earnings of Low Achievers," *American Economic Review* LX (June 1970) p. 411.

¹¹ B. D. Karpenos, "The Mental Test Qualification of American Youths for Military Service and Its Relationship to Educational Attainment, *Proceedings of the American Statistical Association*, Social Statistics Section, 1966.

¹² The weighted average is the product of the percentage of non-Whites in an educational class and the differential for that group, summed over all classes.

IV

Conclusion

IF THE ABOVE ASSUMPTIONS are accurate, the removal of all discrimination in the non-South and South would increase non-White income by 17 and 45 per cent respectively.¹³ While the data indicate that governmental policy could fruitfully focus on the quality of non-White education, the size of these discrimination coefficients suggests that White prejudice is the largest barrier to non-White income equality.

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Appendix

Summary of Calculations

Region	Adjusted Mean Earnings			Relative	Discrimination
	Y_n	Y_w	Y_n/Y_w	Productivity (P_n/P_w)	Coefficient (d) ¹
U.S.	3067	5723	.54	.821	.34
	3204*	5723	.56	.821	.32
	3570**	5723	.62	.821	.24
North and West	3916	5963	.66	.825	.20
	4055*	5963	.68	.825	.18
	4442**	5963	.74	.825	.10
South	2281	5037	.45	.796	.43
	2368*	5037	.47	.796	.41
	2695**	5037	.54	.796	.32

¹ $Y_n/Y_w = P_n/P_w(1 - d)$.

* Adjusted for variations in the taste for leisure.

** Adjusted for differences in quality of education.

¹³ The non-South estimate is remarkably similar to Becker's calculation using the Cobb-Douglas production function technique. Using educated guesses to determine the equation, he concluded that the removal of discrimination would increase non-White income by 16 per cent.

New Hungarian Journal

THE HUNGARIAN ACADEMY of Sciences has established a new journal, *Acta Universitaria*, which is being published eight times a year in two volumes of about 800 pages. Subscriptions per volume are US\$16, DM 64 or £6.75. It presents papers, by non-Marxists as well as Marxists, in English, Russian, French and German. Subscriptions may be ordered from Kultura Hungarian Trading Co., Budapest 62, P.O.B. 149, Hungary, or Stechert Hafner, Inc., 31 East 10th Street, New York, N.Y. 10003.

An Economic Model of Socio-Political Bargaining

By LARRY L. WADE and ROBERT L. CURRY JR.

ABSTRACT. Non-economic social phenomena have been, and are being, explored with analytic methods drawn from economic analysis. Two such analytic concepts, indifference curves and offer curves, have proved useful in such efforts. The concepts are integrated here within a specific formal model which is held to be useful in exploring the central social and political process of bargaining. The impact of three variables—preference, impatience (or time), and reciprocal demand intensity—on political bargaining is shown. The framework provides a scheme around which empirical research can be organized to assist in the integration of economic with other social science theory.

I

Introduction

DURING THE LAST DECADE a heartening integration has begun of economic and other social science theory, and strong evidence exists that the pace of integration will quicken over the next period of theoretical development in the social sciences.¹ The methodology of economic theory has been employed recently to examine problems in general sociology,² in social psychology,³ and, particularly, in political sociology (or political science).⁴ This literature has as its basis the assumption of economizing individuals concerned to allocate "rationally" their scarce resources to multiple objectives. Our basic assumption is a corollary to this: individuals exchange rewards rationally in order to gain a more preferred social position, that is, they maximize.

¹ Actually, the process is one of reintegration, economic and other social theory having diverged only in the late 19th century. For extended statements on this integrative process, see William C. Mitchell, "The Shape of Political Theory to Come: From Political Sociology to Political Economy," *American Behavioral Scientist*, 11 (Nov.-Dec., 1967), pp. 8-37, and, also by Mitchell, "The New Political Economy," *Social Research*, 35 (Spring, 1968), pp. 76-110.

² Peter Blau, *Exchange and Power in Social Life* (New York: John Wiley, 1964).

³ George C. Homans, *Social Behavior* (New York: Harcourt, Brace & World, 1961).

⁴ Mancur Olson, *The Logic of Collective Action* (Cambridge: Harvard University Press, 1965); James M. Buchanan and Gordon Tullock, *The Calculus of Consent* (Ann Arbor: University of Michigan Press, 1962); Charles E. Lindbloom, *The Intelligence of Democracy* (New York: The Free Press, 1965); William Riker, *The Theory of Political Coalitions* (New Haven: Yale University Press, 1962); Anthony Downs, *An Economic Theory of Democracy* (New York: Harper, 1957); and R. L. Curry, Jr. and L. L. Wade, *A Theory of Political Exchange* (Englewood Cliffs, N.J.: Prentice-Hall, 1968). The titles in notes 2-4 do not by any means exhaust the work that has been done recently in this area.

The theory of the economizing (or maximizing) individual is useful to an understanding of certain non-economic social phenomena, such as competition, coalition formation, decision-making and bargaining. The limits of the theory, however, should also be kept in mind, a point emphasized by, among others, the German historical school, the American institutionalists and by the great synoptic social theorists such as Parsons, Weber and Durkheim. In Parsons' first book, *The Structure of Social Action*, 1937, which dealt with the convergence of the work of Marshall, Weber, Pareto and Durkheim, the non-rational, or voluntaristic, character of social behavior is emphasized.⁵ It was held that formal economic theory is unable to deal with the origin or composition of norms, values and wants. In our view, these assessments seem largely correct and, accordingly, our model of maximizing political bargainers deals only with process and not content, the latter remaining comprehensible only through historical or functional explanations.⁶

The issue addressed here concerns bargaining in political democracies and our purpose is to contribute to the formalization of a concept that is central to much contemporary political inquiry but which, for the most part, has been used either impressionistically or with limited conceptual refinement. Bargaining is a central process in pluralistic polities and, as a concept, has provided a central organizing device for many works in political analysis.⁷ The systematization of the concept of bargaining through the application of economic reasoning will, in our view, aid in the general development of economic sociology and, especially, in the part of the field concerned with the understanding of politics.

The genre to which we refer has, then, employed analytic techniques drawn from economic theory. In particular the technique of "indifference analysis" has been viewed as extremely helpful in the analysis of non-economic decision-making processes.⁸ Economists generally are aware of how indifference analysis might be integrated within the context of a

⁵ New York: The Free Press, 2nd Edition, 1949. A recent and incisive effort at synthesizing economic and other social science theory is Adolf Lowe, *On Economic Knowledge: Toward A Science of Political Economy* (New York: Harper & Row, 1965).

⁶ For a thorough discussion of these issues, see Matthew Ehl, "Economic Analysis in an Anthropological Context: Some Preliminary Considerations," *American Anthropologist*, 71 (July, 1969), pp. 421-33.

⁷ Robert A. Dahl and Charles E. Lindblom, *Politics, Economics, and Welfare* (New York: Harper, 1953); Gabriel Almond, "Comparative Political Systems," *Journal of Politics*, 18 (August, 1956), pp. 391-404. William C. Mitchell has called bargaining "the major form of action" in American politics, *The American Polity* (New York: The Free Press, 1962), pp. 291-307.

⁸ Blau, *Exchange and Power in Social Life*; Curry and Wade, *A Theory of Political Exchange*, Chaps. 1 and 2. Chapter 1 of the later volume contains an extensive delineation of indifference analysis for non-economists.

specific trade model which also involves the use of "offer curves."⁹ This possible integration is less familiar to non-economists. However, because social scientists in general are becoming aware of the appropriateness of indifference analysis to their theoretical problems and—to a lesser extent—of the use of offer curve analysis, we have integrated in this article the indifference and offer curve techniques in an effort to add to the capabilities of social scientists interested in these techniques. The discussion is also designed to show as clearly as possible the impact of three variables upon the outcome of a bargain.

The variables to which we refer—(1) individual preference, (2) impatience (or time), and (3) reciprocal demand intensity—are present in virtually all bargaining situations. But, outside of economics, they are probably most clearly present in bargaining falling within the framework of political institutions.

Our purpose, then, is two-fold. First, we suggest to the student of economic sociology how the variables of transitive preference (the factors which determine an individual's indifference map), and impatience and reciprocal demand intensity (the determinants of the offer curve as we will use it) might lead to a mutually acceptable bargain between negotiating partners. To simplify our presentation, we deal with a situation referred to by Tibor Scitovsky as "isolated bargaining."¹⁰ Isolated bargaining is a situation in which two individuals, A and B, must either exchange with each other or not at all. Second, we suggest a pedagogical analytic for possible adoption by non-economists.

II

Indifference Analysis

AN INDIFFERENCE CURVE represents the various quantities of rewards X and Y among which an individual is indifferent. In Figure 1, individual A's indifference curves are arrayed in an indifference "map"—a series of curves. Each is convex to the zero intercept, Oa_1 . On the map, as the curves move farther from the zero intercept, each curve represents a more preferred position. Individual B's map shows indifference curves convex to, and transitive from, the intercept Ab_1 . We assume an initial stock of rewards X and Y with individual A controlling all of X and with individual B controlling all of Y. Point I represents the initial distribution of X and Y.

⁹ See especially Bruno Contini, "Time in Bargaining Negotiations," *American Economic Review*, 58 (June, 1968), pp. 374-94.

¹⁰ Tibor Scitovsky, *Competition and Welfare* (Homewood, Ill.: Irwin, 1958).

The individuals may gain mutually from an exchange of these rewards; that is, each may prefer some distribution other than that indicated by point L, which is acceptable to both individuals as an initial distribution. Exchange of X by individual A to individual B for Y could take place in such a way that indifference curve I_{b_1} is followed downward to the right. If the exchange is conducted at point G, individual B is made no worse

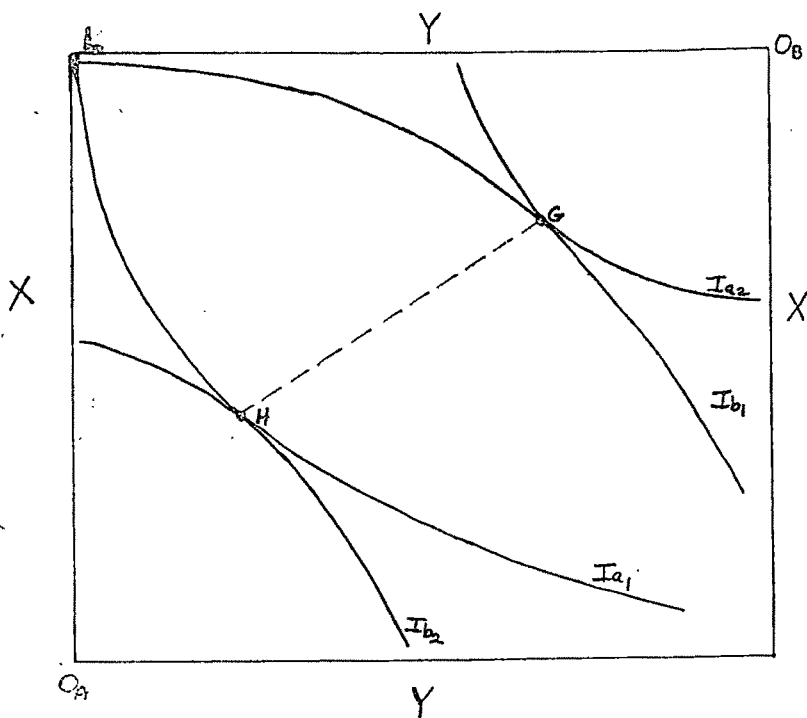


Figure 1

off, but individual A reaches a more preferred position. At point G, indifference curve I_{a_2} is tangential to indifference curve I_{b_1} . A further exchange would result in a less preferred position for at least one individual. Similarly, individual B could exchange at Y to individual A for X in such a way that indifference curve I_{b_2} is followed downward to the right to point H. Such an exchange would leave A no worse off than before but would place B in a more preferred position. At point H, indifference curve I_{a_1} is tangential to indifference curve I_{b_2} and further exchange would result in a less preferred position for at least one individual.

There is a bargaining range between points G and H in Figure 1. Any point along this bargaining range (contact curve) would move one or both partners to positions more preferable than at point L. This range of equilibrium distributions is traced out along GKH, a contact curve formed by the points of tangency of A's indifference curves with those of B. By equilibrium we mean an exchange at some point, such as K, which, when attained, will be maintained until there is a change in the value of the factors that determine the terms of trade. The specific point at which the trading partners will agree upon exchange depends on certain bargaining factors. Two crucial bargaining factors involve the effect of time (the bargaining period) and reciprocal demand intensity. If A is "better situated" in terms of these factors, equilibrium will approach point G; if B, then equilibrium will approach point H. The necessary condition for the achievement of an equilibrium in the bargaining between the two parties is that the individuals' indifference curves must be tangential and their slopes equal to the slope of the terms of trade line. The terms of trade line represents the ratio at which one reward is exchanged for another. We now focus on the determination of the terms of trade by concentrating upon impatience (or time, the bargaining period) and the reciprocal demand intensities of trading partners. These factors are important in determining the line representing the terms of trade, and hence the relative "welfare" positions, of the partners in isolated bargaining.

III

Offer Curves

OFFER CURVES show the various ratios at which an entity is willing to exchange some quantity of a reward which he controls (and wants) for a reward which he wants (but does not control).¹¹ We assume that the determinants of these ratios, and consequently the offer curve, are *impatience* within the bargaining period and the demand *intensity* for rewards in exchange. To illustrate the impact of these two elements in an exchange bargain, we now focus upon the offer curve concept which has long been employed in conceptualizing (1) the terms on which international trade is conducted and (2) the manner by which the trade gains are distributed between trading partners.¹² Marshall-Edgeworth offer curves, as employed here, present useful insights into the problems of conflict

¹¹ For an application of the offer curve technique to non-monetary decision making, see Curry and Wade, *A Theory of Political Exchange*, pp. 26-30.

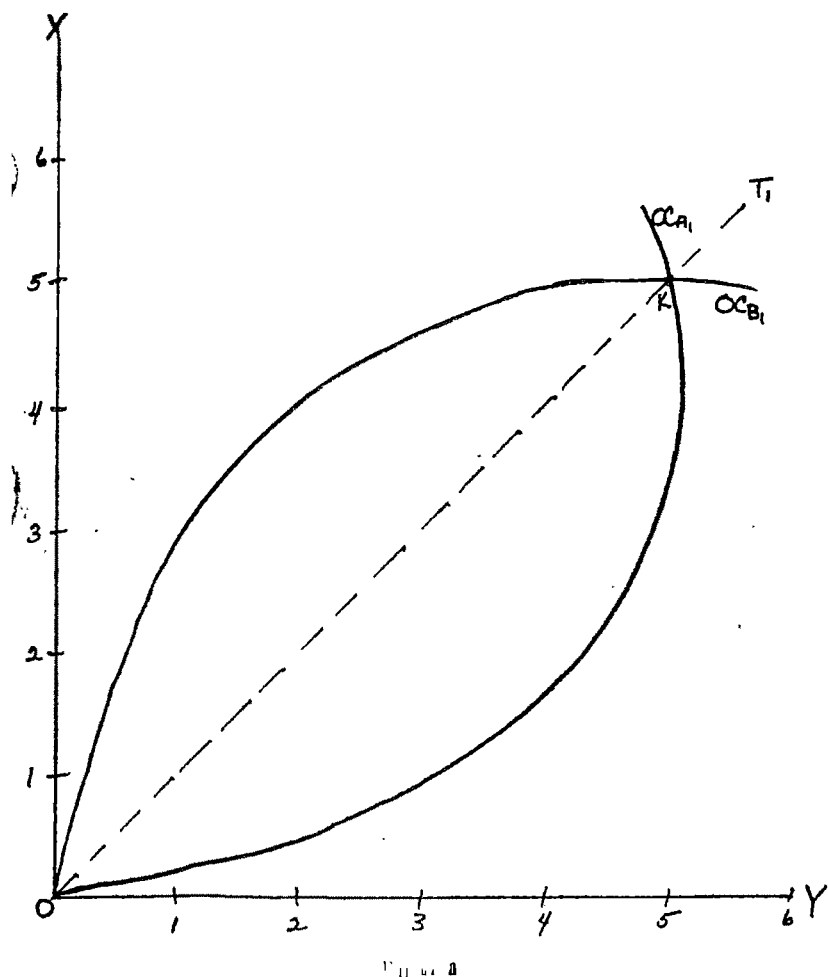
¹² Charles P. Kindleberger, *International Economics*, (Homewood, Ill.: Irwin, 1958).

resolution in a bargaining situation. We begin by making two assumptions. (1) As a bargaining period draws to a close, each partner will offer his partner progressively more favorable terms of trade to assure that some beneficial bargain will be contracted: *e.g.* he becomes more impatient. (2) The trading partners vary in the intensity of their demands for "more preferred positions." Several other assumptions are required. They are: (3) two bargaining entities exist; (4) two bargaining rewards X and Y exist and they are divisible; (5) bargaining is conducted to determine a mutually acceptable ratio at which X and Y are exchanged and divisibility of rewards is acceptable; (6) individual A controls all of reward X and B all of Y; (7) costs of obtaining X and Y are identical for entities A and B; (8) a given pattern of impatience and demand intensity for each individual is fixed, and each is *unaware* of the degree of the other's impatience and demand intensity; and (9) bargaining skills of the individuals are identical. In effect, we are analyzing *only* the roles of impatience within a time period and reciprocal demand intensity. (It is possible to relax these assumptions in order to more nearly approximate existential cases; but the implications for impatience and reciprocal demand intensity in bargaining would be the same as under our strict assumptions.)

In Figure 2, the vertical axis measures units of Y and the horizontal axis measures units of X from the zero intercept to some positive quantities. Offer curve OC_{A1} portrays the ratios at which entity A is willing to offer good X to entity B in exchange for good Y. The slope of the offer curve of A at each subperiod in the bargaining time span indicates the ratios at which A is prepared to sacrifice some X to obtain some Y. The offer curve OC_{A1} shows that entity A is willing to exchange a unit of X for 3 units of Y early in the bargaining period (subperiod 1 in Table 1), but gradually becomes willing to offer relatively more units of X per unit of Y, or conversely, to accept relatively less of Y per unit of X. This is done to insure that some bargain improving A's position will be contracted. At point K individual A is willing to offer its good at an exchange ratio of $1X : 1Y$ (subperiod 5, Table 1). Curve OC_{B1} portrays the ratios at which entity B is willing to exchange various quantities of good Y to individual A for good X at various subperiods throughout the bargaining period.

Entity B is assumed to behave similarly to A. Early in the bargaining period, B is willing to exchange Y at a ratio of one Y for 3 units of X (subperiod 1 in Table 1). However, as time passes, individual B becomes progressively more willing to accept fewer units of X per unit of Y. Entity B is also willing to exchange at the ratio of $1Y : 1X$ (in sub-period

5, Table 1). Table 1 shows the acceptable exchange ratios for A and B at the end of various subperiods. At the end of each subperiod, the institutional structure within which the bargaining occurs permits, we assume, each entity to make explicit the ratio at which it is willing to ex-



change. In this case, an equilibrium exchange ratio of $1X : 1Y$ is acceptable to each trading partner at the same time after subperiod 5. This is shown at point K_1 in Figure 2 and we note this as terms of trade line T_1 .

IV

Indifference and Offer Curves

WE HAVE NOTED that both indifference and offer curve analysis have been used profitably by social scientists interested in the application of economic analysis to non-economic (sociological) phenomena. As yet, however, the integration of these two techniques has not been undertaken by non-economists. We intend to show how these techniques may be so integrated, and, to do so, we must introduce the concept of "the terms of trade." By this we mean the ratio at which bargaining partners exchange rewards in isolated bargaining.

The terms of trade line (established through offer curve analysis) relates to the determination of some equilibrium point along the contact curve (established through indifference analysis). In Figure 3 note that I_{a0} and I_{b0} are tangential at point K. At this point each indifference curve is also tangential to terms of trade line T_1 , which is determined at point K_1 in Figure 2. At point K in Figure 3, each individual is better off than he was at point L; *e.g.*, each has been able to move transitively to a more preferred position, or to a "higher" indifference curve on his indifference map. In moving from L to K, each individual exchanges a portion of his initial reward distribution at a ratio of one unit of X for one unit of Y.

While the exchange has put each in a preferred position, it is not necessarily the case that the offer curves of each will be tangential at point K in Figure 3: that is, they might choose to exchange at some other ratio and, if so, the resulting equilibrium point will not be K.

For example, in Figure 4, we assume that individual A's offer curve is modified by his increasing impatience for some bargain to be struck,¹³ and/or by an increased intensity of demand entailed in his wish to move to a more preferred position. Individual A's new offer curve OC_{A2} (obtained from data in Table 2) indicates that after subperiod 1, for example, he is willing to give 1.5 units of X for every 3 units of Y (rather than 3X : Y after subperiod 1 as in the previous situation).

Now at each subperiod, individual A is prepared to exchange relatively more units of X for Y because the reward Y is demanded relatively more intensely by him and/or because he is more impatient to conclude the bargaining. After subperiod 2, individual A is willing to exchange at a ratio of 2.5X for one Y, a ratio which individual B also finds acceptable after this subperiod.

Thus, the terms of trade T_2 in Figure 4 is determined and shown at

¹³ See Contini, "Time in Bargaining Negotiations."

point H_1 . It is the new terms of trade at which bargaining takes place and is, in fact, one outer limit to the bargain. The new terms of trade means that individual A exchanges 2.5X for one Y. Individual B obviously receives a better terms of trade than before; 2.5X for each unit of Y given up, as shown in Figure 3. Equilibrium is at point H_1 indicating that individual A is neither better nor worse off; he remains on indifference

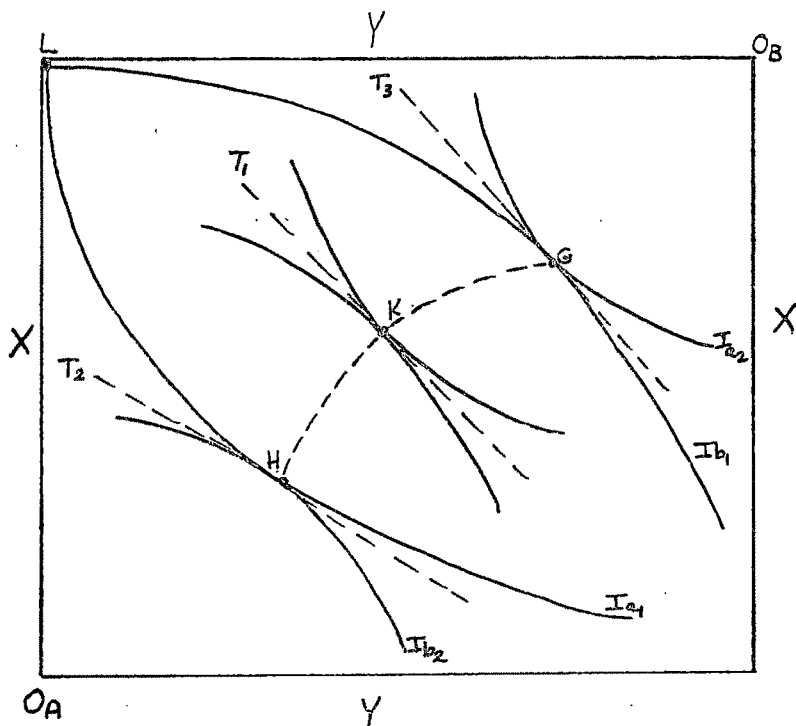


Figure 3

curve I_{a1} (but now at point H rather than point L , one of the two points between which he is indifferent). However, individual B has moved from indifference curve I_{b1} to I_{b2} , or from point L to point H in Figure 3. This, for him, is a more preferred position.

We may show the same type of effect that a similar change could have on the agreement if B became more impatient and/or demanded reward X more intensely. His new offer curve could become OC_{b2} (in Figure 4); the terms of trade would become T_3 as shown at G_1 in the same figure.

Imposing this new terms of trade line on Figure 3, we note that the new equilibrium bargaining point would be at point G. In this case, individual A would move to a more preferred position, point G on indifference curve I_{A2} . Individual B would be no worse off because both points L and

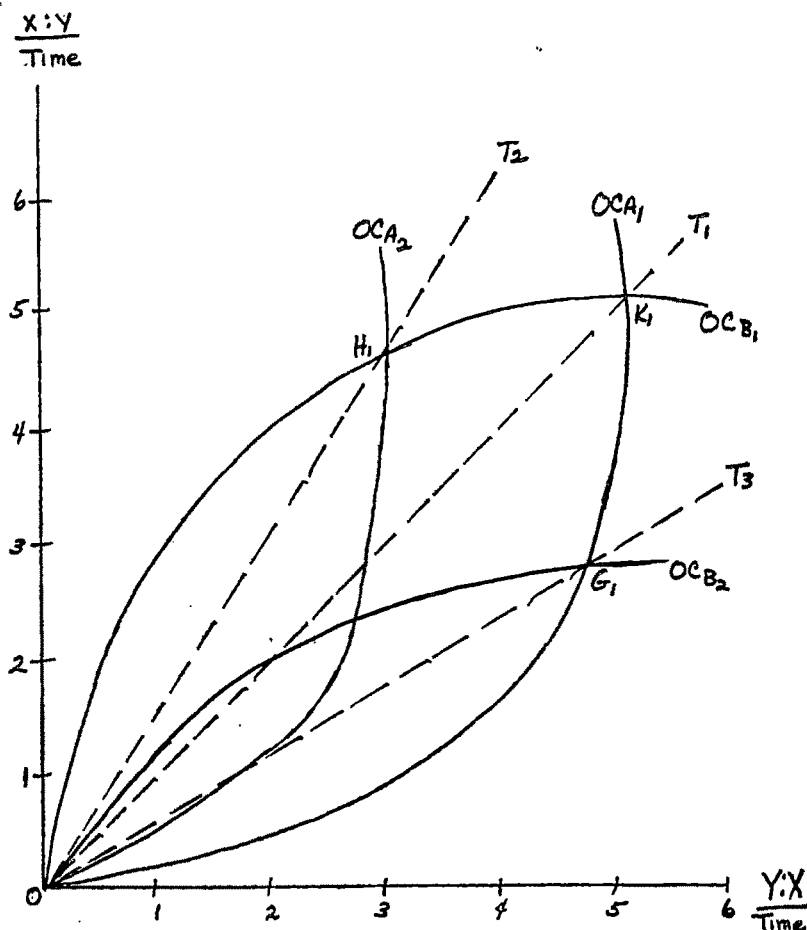


Figure 4

G are on his indifference curve I_{B1} , two points between which he is indifferent.

It is unlikely that individuals A or B would consciously agree to a bargain which would permit the other to be the sole beneficiary of the exchange. Points G and H, then, are outside limits to the bargaining range

and a bargain would be struck on terms depicted by some point within this range.

V

Conclusion

WE MAY NOW INTERPRET our assumptions with respect to (1) how likely it is that a bargain will take place, (2) how early in the bargaining period it will be reached, and (3) on what terms of trade, or exchange, it will be made. The relatively more intense one partner's reciprocal demand for a more preferred position and/or the relatively more impatient he is, (1) the more probable it is that a mutually acceptable exchange will be contracted, (2) the more probable it is that the bargain will be contracted early in the bargaining period, and that (3) the bargaining outcome will be more beneficial to the other party to the bargain. Data collected and organized around the scheme advanced here would provide for the systematic and comparative study of non-economic bargaining, particularly political bargaining. Although all existing studies of political bargaining of which we are aware lack sufficient data to test fully the propositions outlined in this paper, such propositions appear impressionistically to hold in a number of empirical studies of political bargaining that have been conducted in less explicit frameworks.¹⁴

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¹⁴ See, for example, Edward Banfield's study of political bargaining in Chicago, *Political Influence* (New York: The Free Press, 1961); Stephan K. Bailey and Howard D. Samuel's discussion of congressional log-rolling, *Congress at Work* (New York: Holt Rinehart & Winston, 1952), Chap. VII; Wallace S. Sayre and Herbert Kaufman's study of bureaucratic bargaining in New York, *Governing New York City* (New York: Russell Sage Foundation, 1960), Chap. VIII; Robert A. Dahl's study of community decision-making, *Who Governs* (New Haven: Yale University Press, 1961) especially Parts IV and V; Aaron Wildavsky's analysis of federal budgeting, *The Politics of the Budgetary Process* (Boston: Little, Brown, 1964); and Walter F. Murphy's study of bargaining on the Supreme Court, *Elements of Judicial Strategy* (Chicago: University of Chicago Press, 1964). The consequences of bargaining for public policy are given in propositional form by Mitchell, *The American Polity*, pp. 303-07.

Table 1

ACCEPTABLE EXCHANGE RATIOS

<i>Subperiod</i>	<i>A's Ratio</i>	<i>B's Ratio</i>
1	X : 3Y	3X : Y
2	X : 2.5Y	2.5X : Y
3	X : 2Y	2X : Y
4	X : 1.5Y	1.5X : Y
5	X : 1Y	1X : Y
6	X : .9Y	.5X : Y

Table 2

ACCEPTABLE EXCHANGE RATIOS

<i>Subperiod</i>	<i>A's Modified Ratio</i>	<i>B's Ratio</i>
1	1.5X : 3Y	3X : Y
2	2.5X : Y	2.5X : Y
3	3.0X : Y	2X : Y
4	3.5X : Y	1.5X : Y
5	4.0X : Y	1X : Y
6	4.5X : Y	.5X : Y

Laws Favor Land Speculation

IN SIX OF THE 12 STATES which assess agricultural or forest land as such rather than upon the "highest and best use" of the land there is no provision for recapturing the lost taxes if the land is sold for development. These states are Arkansas, California, Connecticut, Delaware, Florida and New Mexico. There seems to be growing agreement that this leads to abuse, that is, speculative withholding of land from the market, according to a report presented to the California State Board of Equalization.

Tax Reform and Urban Renewal

By STEVEN CORD

MANY URBAN RENEWAL AUTHORITIES have advocated, as an aid to solution of the problems of urban renewal, the gradual exemption of improvements from real estate taxation with municipal revenue derived instead from a heavier tax on land. How would this reform of the real property tax work?

The present real estate tax bears equally on land and buildings. In order to accomplish the transition to land value taxation in, say, ten years, the tax rate on buildings must be lowered to 0.9 of the land tax rate in the first year, 0.8 in the second year, then 0.7 and so on. At the end of ten years, there will be no tax at all on improvements—they will be completely tax exempt—and the municipality's revenue will be derived entirely from a tax on assessed land values. During this whole time, the total tax intake may have to be lowered or raised to suit the changing revenue needs of the municipality. But the ratio between the tax rate on land as compared to the tax rate on buildings will change according to the year as indicated.

Notice that the tax is applied locally, just as is the present real estate tax. Notice, too, that it is introduced gradually, in order to allow individual real estate owners enough time to adjust to the new tax situation. As will be seen, those owners who have been under-using their land will need this time to avoid financial hardship. Lastly, the land value tax must not exceed the annual rental value of a piece of land (otherwise the tax will start to bear upon the improvement). Perhaps an example will clarify the matter.

Imagine two adjacent pieces of land, both worth, say, \$10,000. One is vacant and the other has a \$50,000 building on it. If the real estate tax rate is 3 per cent, then the empty lot owner pays a tax of \$300 a year and his neighbor pays \$1,800 (you may well ask why the latter should be fined for improving the community and for providing extra housing). Because the building will eventually be removed under land value taxation, the empty lot owner would eventually be paying the same tax as his neighbor (and thus would be impelled to improve his land without suffering any tax penalty for so doing). The municipal real estate tax

would be levied entirely on land. Since land rent is usually about 6 per cent of land price, the land value tax on each lot could be increased to \$600 plus whatever is now being collected in land value taxation by the present real estate tax (assuming no changes in market values, of course). Beyond that figure no land value tax ought to go.

Allusions have been made to certain alleged benefits of land value taxation. They might now be sketched out.

In the first place, the tax would be quite easy to administer, or so the Australian, New Zealand and Pittsburgh experiences would definitely indicate. It is easy to see why: buildings are more difficult to assess than land, and eventually their assessment would become unnecessary. The real estate tax assessor's problems would be approximately halved.

Even more importantly, a tax on land values forces land to be put to full economic use. The land user must erect improvements that will at least yield an income to pay the tax, plus enough left over for profit. Ricketty buildings on valuable land—*slums*—would therefore be strongly discouraged, and so would urban sprawl. Uneconomic use of the land would gradually disappear. Land use would be directly geared to land need!

Lastly, it can eliminate the burdensome taxation that falls on buildings and other improvements. This burden is borne by homeowners, factory owners, and tenants; in the case of commercial property, it is ultimately borne by consumers. We want new construction, and yet we tax buildings. We want to encourage new industry, and yet we tax factory buildings. We have run-down central-city cores, yet we heavily tax much-needed developmental efforts. Have not our tax policies contributed to urban blight in America?

Many people think that because cities need tax revenue, we have no alternative, but one does exist—land value taxation. It is the only tax that doesn't inhibit production but increases it. Who could keep land idle or underused if he had to pay a heavy tax on land values? Tax buildings and you discourage construction; tax land, and you force more of it onto the market! (Land is limited in supply but man-made wealth is not.)

These are not the only benefits of land value taxation, of course. There are others. But these are highly persuasive, I think.

The Effectiveness of Corporate Tax Increases As an Anti-inflationary Policy

By G. S. LAUMAS

IN A RECENT ISSUE of this *Journal*¹, the author had analyzed the short-run effects of an increase in the corporation income tax on the level of income, employment and prices. It was shown that the traditional conclusion that corporate tax rate increases are anti-inflationary is based on two strict assumptions: (a) there is no shifting of the tax by the corporations, and (b) there are flexible prices. It was concluded that if "prices have downward rigidity, and there is some tax shifting, the effectiveness of contracyclical tax rate increases is reduced almost to the point where these may rather have just the opposite effect."² The purpose of this paper is to develop the analysis further and to show by what percentage amount the prices would increase if varying degrees of increased tax liability are shifted forward by the corporations. The analysis is of great value in view of the imposition of the surcharge on corporation income tax liability in 1968 which was mainly based on the assumption that the surcharge would help in controlling inflation.

I

BEFORE PROCEEDING FURTHER it seems appropriate to give a brief summary of the traditional and current views on the shifting of the corporation income tax and the effectiveness of the contracyclical increases in the corporation income tax.

The traditional view that the corporation income tax cannot be shifted in the short-run is based on the analysis of the tax shifting process within the framework of the neoclassical theory of the firm.³ With the help

¹ G. S. Laumas, "The Short-Run Economic Effects of Corporate Taxation," *Am. J. Econ. Sociol.*, Vol. 27, No. 4 (October, 1968).

² *Ibid.*, p. 370.

³ There exists an extensive literature on this topic. For example, see Edwin R. Seligman, *Studies in Public Finance* (New York: Macmillan, 1925), pp. 59-84; Hugh Dalton, *Principles of Public Finance* (London: Routledge and Kegan Paul, 1954), (4th ed.), p. 74; Ursula K. Hicks, *Public Finance* (London: Nisbet, 1947), pp. 157-58; Richard Goode, *The Corporation Income Tax* (New York: Wiley, 1951), pp. 139-48; D. H. Robertson, "The Colwyn Committee, the Income Tax and the Price Level," *Economic Journal*, Vol. 37, No. 142 (December, 1927), pp. 566-81, reprinted in R. A. Musgrave and Carl Shoup (eds.), *Readings in the Economics of Taxation*, American Economic Association (Homewood, Illinois: Richard D. Irwin, 1958), pp. 297-311.

of this theory, it is possible to show that if a firm is maximizing its before-tax profits, the imposition of or a change in the statutory rates of a corporation income tax gives the firm no reason to change its product price. Neither marginal cost nor marginal revenue is affected by the tax; hence price and output adjustments are not advantageous. The argument holds irrespective of the form of competition in the product market so long as the point of profit maximization occurs at the equality of marginal cost and marginal revenue.

In recent years doubts have been expressed about the realism of the basic assumption of the neoclassical theory of the firm; namely, that firms maximize profits by equating marginal cost and marginal revenue.⁴ It is suggested that in their pricing decisions, the firms have to choose among many competing objectives, rather than the unique objective of profit maximization implied by the neoclassical theory. It is believed that in modern free enterprise economies, pricing decisions are dominated by the actions of restrained oligopolists or monopolists who set their prices at a level which will cover their full costs plus a margin for profits, or who endeavor to earn a target rate of return on their investment. To accomplish this goal, they are supposed to possess enough market power to shift any tax increases which may threaten to erode their pre-set profits or rates of return. The probability that the tax increase will be shifted is high because it affects all the corporations. It is also suggested that general increases in costs and taxes will lead to a general rise in prices and that the monetary authorities will validate such increases by an accommodating monetary policy.

A number of empirical studies of the shifting of the corporation income tax have been made in the recent years.⁵ Some of them have shown

Professor Robertson, however, leaves the reader with the impression that it is possible that a tax on profits may be shifted. His argument was mainly directed at W. H. Coates' statistical thesis that since the price is determined by the marginal firm which makes no profits, the tax is not shifted. See W. H. Coates, "Incidence of the Income Tax," Appendices to the Report of the Commission on National Debt and Taxation (London: H. M. Stationary Office, 1927), pp. 65-113.

⁴ See Robert F. Lanzillotti, "Pricing Objectives in Large Corporations," *American Economic Review*, 48 (December, 1958), pp. 921-40; A. D. H. Kaplan, Joel B. Dirlam, and Robert F. Lanzillotti, *Pricing in Big Business, A Case Study* (Washington, D. C., Brookings Institution, 1958); R. L. Hall and C. I. Hitch, "Price Theory and Business Behavior," *Oxford Economic Papers*, May 1939, pp. 12-45; R. A. Gordon, "Short Period Price Determination in Theory and Practice," *American Economic Review* 38 (June, 1948), pp. 265-88.

⁵ See Marian Krzyzaniak and Richard A. Musgrave, *The Shifting of the Corporation Income Tax: An Empirical Study of Its Short Run Effects Upon the Rate of Return* (Baltimore: Johns Hopkins Univ. Press, 1963); Karl W. Roskamp, "The Shifting of Taxes on Business Income: The Case of West German Corporations," *National Tax Journal*, Vol. 18, No. 3 (September, 1965), pp. 247-57; G. S. Laumas, "The Shifting of the

that the corporation income-tax is fully shifted—even overshifted. Others have shown partial shifting of the tax. Still others find no strong evidence of tax shifting. It should be pointed out that different methods for estimating the degree of shifting were used in these studies. However, on the basis of the empirical evidence that has been brought to bear on this issue it can be concluded that at least a part, if not the whole, of any increase in the income tax liability of corporations is shifted by them.

II

IF WE ACCEPT the hypothesis that a part of the additional income tax burden is shifted by the corporations, the important problem now is to analyze the effect of a shifted tax on the price level. To do this a simple set of relations are developed in the following analysis. The variables used are defined below:

- P_1 Gross or before-tax profits in period 1.
- P_2 Gross or before-tax profits in period 2.
- NP_1 Profit after tax in period 1.
- NP_2 Profits after tax in period 2.
- R_1 Effective tax rate (defined as the ratio of tax liability to gross profits) in period 1.
- R_2 Effective tax rate in period 2.
- S Sales
- L Price Level

By definition

$$NP_1 = P_1 - R_1 P_1 \quad (1)$$

$$NP_2 = P_2 - R_2 P_2 \quad (2)$$

and $P_2 = P_1 + \Delta P \quad (3)$

As a first approximation we shall assume that corporations earn the same amount of gross profits in period 1 and 2. Thus if the tax rate R is increased, the following relationships would exist between NP_1 and NP_2 depending on the degree to which the tax is shifted:

Corporation Income Tax—A Study with Reference to Indian Corporations," *Public Finance/Finances Publique*, Vol. 21, No. 4 (December, 1966); Robert W. Kilpatrick, "The Short-Run Forward Shifting of the Corporation Income Tax," *Yale Economic Essays*, (Fall, 1965), pp. 354-420; J. C. Cragg, A. C. Harberger, and P. Mieszkowski, "Empirical Evidence on the Shifting of the Corporation Income Tax," *Journal of Political Economy*, December 1967, pp. 811-21; R. J. Gordon, "The Incidence of the Corporation Income Tax in U.S. Manufacturing," *American Economic Review*, September, 1967, pp. 731-58; M. Krzyzaniak and R. A. Musgrave, "Incidence of the Corporation Income Tax in Manufacturing: Comment," *American Economic Review*, December 1968, pp. 1358-60; G. S. Laumas, "The Shifting of the Corporation Income Tax in India," *Economia Internazionale*, May, 1969.

If the tax is shifted by 0 per cent $NP_2 < NP_1$

If the tax is shifted by 100 per cent $NP_2 = NP_1$

If the tax is shifted by more than 100 per cent $NP_2 > NP_1$

Thus if λ denotes the fraction by which the tax is shifted, then

$$NP_2 = NP_1 - (1 - \lambda) (R_2 - R_1) P_1 \quad (4)$$

and by definition

$$P_2 = NP_2 + R_2 P_2 \quad (5)$$

Substituting (4) into (5)

$$P_2 = NP_1 - (1 - \lambda) (R_2 - R_1) P_1 + R_2 P_2 \quad (6)$$

$$\text{or } P_1 + \Delta P = P_1 - R_1 P_1 - (1 - \lambda) (R_2 - R_1) P_1 + R_2 P_2 \quad (7)$$

$$\text{or } \Delta P = P_1 - P_1 - R_1 P_1 - [R_2 P_1 - R_1 P_1 - \lambda R_2 P_1 + \lambda R_1 P_1] + R_2 (P_1 + \Delta P) \quad (8)$$

$$\text{or } \Delta P = P_1 - P_1 - R_1 P_1 - R_2 P_1 + R_1 P_1 + \lambda R_2 P_1 - \lambda R_1 P_1 + R_2 P_1 + R_2 \Delta P \quad (9)$$

$$\text{or } \Delta P = \lambda R_2 P_1 - \lambda R_1 P_1 + R_2 \Delta P \quad (10)$$

$$\text{or } \Delta P - R_2 \Delta P = \lambda P_1 (R_2 - R_1) \quad (11)$$

$$\text{or } \Delta P (1 - R_2) = \lambda P_1 (R_2 - R_1) \quad (12)$$

$$\text{or } \frac{\Delta P}{P_1} = \lambda \frac{(R_2 - R_1)}{(1 - R_2)} \quad (13)$$

Equation (13) states that the increase in profits would equal the fraction by which the tax is shifted multiplied by the ratio of the increase in the effective tax rate and unity minus the effective tax rate in period 2. Thus if the tax is shifted by 100 per cent the change in profits would equal $(R_2 - R_1)/(1 - R_2)$.

However, the increase in profits would come from an increase in the money value of sales. If we assume the following relationship between profits and sales:

$$P = aS \quad (14)$$

$$\text{and } \Delta P = \Delta aS \quad (15)$$

$$\text{then } \frac{\Delta P}{P} = \frac{\Delta aS}{aS} \quad (16)$$

$$\text{or } \frac{\Delta P}{P} = \frac{\Delta S}{S} \quad (17)$$

Equation (17) shows that sales would have to grow at a rate equal to that of profits:

In the short run, the stock of capital and productive capacity is approximately fixed. We may thus have an inelastic supply of corporate products. If we assume that the supply of corporate products is infinitely inelastic, it can be easily seen that price level of corporate goods would rise at the same rate as sales. Note that since we have assumed that the supply of physical goods is infinitely inelastic, sales would increase only in money terms via the increase in prices.

Thus the relationships stated in the above analysis can be summarized as:

$$\lambda \frac{(R_2 - R_1)}{(1 - R_2)} = \frac{\Delta P}{P} = \frac{\Delta S}{S} = \frac{\Delta L}{L} \quad (18)$$

Table I shows the percentage increase in prices corresponding to various degrees of shifting of the corporation income tax. The calculations are based on the assumption⁶ that $R_1 = .4295$ and $R_2 = .4677$.

Table 1

<i>Percentage by which the tax is shifted</i>	<i>Percentage by which the price of corporate goods would increase</i>
25	1.80
50	3.59
75	5.39
100	7.18
125	8.98
150	10.77

III

BASED ON THE ABOVE analysis it may be concluded that the imposition of a surcharge or an increase in the rates of the corporation income tax does not seem to have any anti-inflationary effects as generally believed.

Inflation is caused by a number of factors which have been fairly well identified in the literature. The contribution of this paper is to highlight another important factor which may cause inflation and which has been generally ignored in the literature. It is not possible here to isolate the contribution of each of the factors causing inflation. However, based on certain assumptions it has been possible to show here the probable impact which a shifted corporation income tax will have on prices.

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⁶ The values of R_1 and R_2 are derived from the United States data for the years 1967 and 1968 respectively. Corporate profits before tax were \$78 billion in 1967 and \$88.3 billion in 1968. Profits tax liability in 1967 was \$33.5 billion and in 1968 it was \$41.3 billion. See *Survey of Current Business*, Department of Commerce, June 1969, p. 9.

New Center for Inter-disciplinary Study

COURSES at the National Autonomous University of Mexico's School of Science and Humanities began in 1971, initiating a new phase in the country's system of higher education.

The School is a center for inter-disciplinary teaching and research, geared to scientific advances and compatible with the technological development policy. It represents an effort to surmount the structural limitations of traditional education and constitutes the first step in a set of university reforms.

The progress achieved by Mexico at all levels demands greater specialization. However, erroneous interpretations of this need have raised artificial barriers around the different areas of human knowledge, creating professional "islands" that act contrary to the benefits of specialization.

To correct this deficiency, the School of Science and Humanities will offer its students a more well-rounded education through inter-disciplinary instruction which, far from reducing the profundity of research and specialized studies, will stimulate it by providing access to different methodologies.

The School is a flexible instrument of renovation, designed to generate initiative and cooperation among university students and teachers. It surpasses traditional teaching systems by practicing active education by which students conquer knowledge instead of receiving it and teachers coordinate efforts rather than transmit information.

The accumulation of data is supplemented by experimentation, thus relating theory to practice. "Learning to learn," students will be able to work in programs that combine teaching and inter-disciplinary research. This will prepare them to handle the methods and idioms of different specialties.

In order to endow students with solid basic training, the study plan contains four fundamental disciplines: experimental scientific methods, historical method, mathematics and Spanish. A number of different obligatory and optional courses are combined to provide elements enabling students to develop their vocational inclinations and abilities.

The College's academic units synthesize the methodologies related to basic disciplines and combine academic teaching with practical training, thus providing graduates with a reasonable terminal education. [From the Office of the President of Mexico.]

The Initial Decision to Build the Supersonic Transport

By DAVID S. LAWRENCE

I

Introduction

ON MARCH 24, 1971, the United States Senate joined the House in rejecting an administration request for \$134 million to continue work on two supersonic transport (SST) prototypes. Thus, in the view of most observers, a program more than a decade in the making was abruptly terminated. Environmental issues notwithstanding, in the final analysis the SST's defeat was a rejection of its economics.

So sharp a change in the direction of government invites inquiry into its original purposes. If those purposes were no longer valid—as would seem to be the judgment of the Congress in March, 1971—we may ask on what bases they were valid in the first place, and what conditions, if any, since had changed.

Thus the initial decision to sponsor the aircraft is considered in terms of its economic and political dynamics. The government's decision is seen as a two-layered affair, the components of which were first, whether to participate in the private sector through support of the air industries, and second, whether to sponsor the SST program.

Support of the air industries was an appropriate goal in 1960, reflecting government's desire for increased economic growth as well as its need to protect that sector against what then appeared to be an impending slump. The SST as a specific project does not fare as well, since it could not effectively fulfill the overall goal.

II

The Background of the Decision

THE SST PROGRAM can be said to have begun in mid-1960, when it became apparent that the post-Korea decline in military aircraft and engine sales would not stabilize at a satisfactory level. The outlook for commercial aircraft sales was also bleak; Boeing's 707, Convair's 880, Douglas' DC-8, and Lockheed's Electra represented sunk costs of almost three-quarters of a billion dollars, with break-even production not yet in sight.¹

At the same time, the trunk airlines themselves were in serious difficulty.

¹ United Research, Inc., cited by *Aviation Week*, Nov. 7, 1960, pp. 44-45.

On top of increasing technical costs, vigorous competition, and a sticky fare structure, the airlines had to finance in quick succession two new generations of flight equipment.

The air industries, by any measure, were grossly undercapitalized. Further air transport development clearly would have to rely on government sponsorship. But the traditional source of sustenance itself was in doubt, a question having been raised as to the efficacy of manned aircraft *vis-à-vis* guided missiles. In consequence of this uncertainty, the Air Force in December 1959 had drastically cut back the B-70 bomber program, its major large-aircraft effort at the time.

In January 1960, industry representatives began to plump for government sponsorship of a commercial supersonic transport, and by May the Federal Aviation Administration (FAA) was engaged in serious studies of its feasibility. The concept had been considered in the U.S. and in the United Kingdom at least as early as 1955, and Elwood R. Quesada, Eisenhower's FAA Administrator, seems to have believed in 1958 that some kind of commercial SST would fall out of the B-70 program. But the U.S. SST project as such was not actually assembled until the occasion of hearings before the House Committee on Science and Astronautics in May 1960.

By mid-January 1961, the Eisenhower administration had assigned the first specific funding to SST development (a reluctant \$5 million), and acceleration of the program became part of the new administration's call to improve America's prestige.

When Kennedy's task force on national aviation goals ("Project Horizon") made its report in September 1961, development of a commercial SST was a foregone conclusion. Although the task force itself saw the total program costing "of the order of \$1 billion," and the government commitment not having to exceed "a few tens of millions," \$5 billion was effectively committed. Even though the President was not yet fully convinced, the government, for all intents and purposes, had decided to sponsor an SST.²

Important developments unfolded in 1962.³ Shortly after the first design study contracts were awarded, Najeeb Halaby, Kennedy's FAA

² U.S. Federal Aviation Agency, *Report of the Task Force on National Aviation Goals (Project Horizon)*, (Washington: FAA, September 1961), p. 79.

³ Much of the chronological summary leans on the following sources: John Mecklin, "The \$4-Billion Machine that Reshapes Geography," *Fortune*, February 1967, pp. 113-17; Aerospace Industries Association, *United States Supersonic Transport* (an industry position paper), Washington: AIA, November 1966; The Boeing Company, correspondence of June 12, 1968; and various issues of *The New York Times* and *Aviation Week* between 1961 and 1969.

Administrator, observed first hand the progress made by the French on their own SST program, and he returned to Washington with an immediate recommendation to fire up the B-70 Research and Development budget. Kennedy, though, favored the greater involvement of the manufacturers and potential users, and the controversial SST cost-sharing formula of 25 per cent industry to 75 per cent government was then established.

At the end of the year, Britain and France formally entered into a joint venture to produce the Concorde, a transport designed to cruise at mach 2, twice the speed of sound. In June 1963, Pan American World Airways announced its intention to purchase six of the Concorde, and on the following day Kennedy confirmed that the United States would in fact develop an SST of its own. His program called for a larger, faster plane, to be developed in six years at a billion dollar cost, three-quarters of which (as first conceived) was to be covered by the government.

In August the FAA opened the first phase of its design competition, which ultimately was to last until December 1964. There followed a year of government review, after which, over growing congressional opposition, Boeing and General Electric were selected to build prototype equipment.

The program, however, was in trouble. The government's share of the costs had grown to 90 per cent. Congress was increasingly hostile, the FAA/Department of Defense (DOD) program management was rationing funds on a month-to-month basis so that the winning manufacturers had only vague and limited financial support, and a rift had developed within the administration itself on the program's feasibility.⁴

By May 1967, largely in response to balance of payments problems, the momentum of the program had rolled over its detractors. Its most vocal critic had left government, a cautious report of the Institute for Defense Analyses had been dismissed out of hand, the FAA predicted a strong demand for SST travel and a good profit potential,⁵ and the President authorized construction and flight test of two Boeing prototypes.

After persistent rumors of engineering problems, it became apparent in February 1968 that high on the list of program snags was a serious technological instability in the winning airframe design, and that the cor-

⁴ The minority views are perhaps best represented by Stephen Enke, "Government-Industrial Supersonic Transport," *AMERICAN ECONOMIC REVIEW*, 57 (May 1967), pp. 71-79; and Norman J. Asher *et al.*, *Demand Analysis for Air Travel by Supersonic Transport*, (a report of IDA's Economic and Political Studies Division), 2 vols. (Washington: IDA, 1966). Enke was with IDA himself before coming to DOD, where he was Deputy Assistant Secretary for Economics.

⁵ U.S. Federal Aviation Agency, *Economic Feasibility Report—U.S. Supersonic Transport* (a report of the economics staff, Office of SST Development), (Washington: FAA, April, 1967.)

rection of design errors might add a year to the program. Under these circumstances a funding cut was inevitable, and SST money was dropped from the FAA's budget request in April. This was the status of the program, against a background of new congressional pressure for complete government withdrawal, when the government changed hands in January 1969. The Nixon administration, not unexpectedly, conducted its own feasibility study, with an eye to progressing (and presumably competitive) programs in Britain and France, and in the Soviet Union.

III

The Decision to Support the Aircraft Industry

ALTHOUGH THE PROJECT had no dimension until the Concorde scare of June 1963, it previously had been identified by the Kennedy administration as one of several possible alternatives for entry into the private sector. It is thus appropriate to explore that overall policy before considering the SST itself.

The quantitative impact of aircraft manufacturing on the economy is great, involving 3.7 per cent of the non-agricultural labor force and 3.8 per cent of Gross National Product (GNP).⁶ Moreover, small changes in aerospace activity may result in disproportionately large imbalances in the resource markets. This is evident in the 1958 inter-industry input-output data:⁷ 5.7 per cent of the output of communications equipment, 6.7 per cent of metal-working machinery, 6.6 per cent of stampings and related goods, and significant shares of other industries are taken by the aircraft manufacturers. It seems consonant with the Kennedy administration's concern with economic growth rates that it should have devoted particular attention to the aircraft industry. In fact, the important influence of that industry on economic growth can be seen in its historical relation to government, a symbiotic association which is peculiarly—but not uniquely—inexplicable in terms of the microeconomic model.

Specifically, events of the late 1950s suggested the beginning of an adverse structural change within the air transport industry, which was in danger of losing its military base as it was then constructed. The manufacturers faced simultaneously the collapse of the B-70 program, indicative of the diminishing importance of manned military aircraft, and the pro-Viet Nam lull in military expenditures generally. Thus the Martin Company, in 1959, after the failure of its P6M Navy aircraft program, severed

⁶ U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics—1967*, Bulletin No. 1555, pp. 56, 291.

⁷ *Survey of Current Business*, September 1965, pp. 34–39, 46–49.

its roots in transport aviation and committed the total of its resources to the manufacture of unmanned missile systems.

Mindful that the market mechanism might impel other firms to follow Martin's lead, the government had to reexamine the nature and extent of its support of the industry in light of the relative significance of the commercial air transport business. Its conclusions seem to have been similar to those reached by the British government under parallel circumstances. The U.K.'s Plowden Committee favored support of air transport on the basis of five main points: defense and foreign policy, social benefits, technological externalities, balance-of-payments benefits, and finally the industry's inherent financial vulnerability. The committee particularly noted that the industry, with its traditions and glamour, was a symbol of national aspirations, and they suggested that when a nation believes itself to have lost many such symbols, it should not summarily dismiss that fact.⁸ Yet, in the absence of serious DOD interest in manned aircraft, industry would likely have pursued the transport market in a desultory manner, if at all. It is significant that virtually all commercial air transport technology is derived from military applications, whereas 96 per cent of military technology is sponsored by the government itself.⁹

Government's involvement in the economy can sometimes be explained in terms of its desire for political control, but that rationale does not seem to explain the events under study. Samuelson has argued in a recent essay that "there are no rules concerning the proper role of government that can be established by *a priori* reasoning,"¹⁰ and it would appear that this case does not fit a clearly defined rule. If the intervention in aircraft manufacturing was unrelated to present resource optimization, perhaps it can best be understood in the context of development. The impact of aircraft manufacturing on the economy—particularly on the resource markets—is such that growth in the industry can be presumed unusually conducive, and instability in the industry unusually threatening, to growth generally.

It is hypothesized that the administration saw in the air transport in-

⁸ United Kingdom, Committee of Inquiry into the Aircraft Industry (Plowden Committee), *Report of the Committee*, Presented to Parliament December 1965 (London: HMSO, 1965), pp. 24, 28.

⁹ C. W. Sherwin and R. S. Isenson, *First Interim Report on Project Hindsight* (a report of the Office of the Director of Research and Engineering) (Washington: DOD, October 13, 1966). Peck and Scherer, however, believe it less than 87 per cent (*The Weapons Acquisition Process: An Economic Analysis*. Boston: Harvard Business School, 1962, p. 215).

¹⁰ Paul A. Samuelson, "The Economic Role of Private Activity," *The Collected Scientific Papers of Paul A. Samuelson*, ed. Joseph E. Stiglitz (Cambridge: MIT Press, 1966). Vol. II, p. 1423.

dustry the benefits identified by Lord Plowden's committee, that it feared diminution of those benefits—particularly those related to technology—in consequence of its own de-emphasis of manned aircraft, and that it decided, in consideration of potential side-effects on economic development, that the country's airplane manufacturing capability needed special sustenance from without the private sector.

IV

The Decision to Sponsor the SST

PROBLEMS INHERENT in government domination of a private sector project are legion. Primary among them are the government's unwillingness to let go, and its tendency to supersede what Keynes called the traditional advantages of individualism, as it has in the case of the Anglo-French Concorde. If the rationale for intervention is indeed development, however, then arguments from the microeconomic model lose their qualitative relevance. Yet they may be drawn upon if it can be shown that the penalty in resource misallocation is comparatively severe. And, if the rationale is based on development, a program is vulnerable to criticism if its enhancement of that development is ineffective.

If we accept the premise of intervention in consideration of economic development, the SST as a vehicle for intervention seems to fail on several points.

First, because of political and technical problems, federal power in the form of investment in the SST was not applied to the economy until five to seven years after the decision was made to apply it, and most of it was still pending when the program was terminated. In the intervening period much has happened to the economy. The aircraft industry in particular saw a great resurgence of demand for commercial transports and may now have come full circle to another period of stagnation. Certainly we can see in retrospect that the urgency of SST investment was transitory. We do not take issue with errors in prophecy, but we question the choice of a long lead-time program, technologically ethereal, as a medium for economic first aid.

A second point is the impact of the program on the industry's structure. In the period immediately following the SST program, North American Aviation and Douglas Aircraft underwent drastic restructuring by merger with Rockwell and McDonnell respectively. Thus disappeared as such the developer of the B-70 and the only commercial transport builder who did not hold an SST contract. These events were in some respects coincidental. Their relation to the SST program is confused in the tangle of

shifting capital that preceded what appears to have been a stabilizing of the aircraft oligopoly.

The effects of changes such as these are felt well outside the manufacturing area itself. The view of a recent panel (dominated by industry people) was that the government's role in the SST would not only "radically alter the balance of competitive forces within the air transport industry" itself, but also would "have multiplicative impact on the air transport system as a whole" because of the broad interaction of its sub-systems (such as airports and vehicles).¹¹ This was a provocative point which could not easily be brushed aside, and proponents of the program had in fact urged that as many firms as possible be brought into the system to free the participants from the stigma and inevitable restraints of monopoly power.¹² But it is a fact that the program had served to increase concentration in the industry.

A third weakness in the decision was that, were a commercial transport to be backed, the SST was not the best alternative around. On the basis of operating cost, for example, as the *Economist* has observed, "For the first time in aviation, the slower of the two aircraft (*i.e.*, the SST and the Boeing 747) is dramatically the cheaper to fly," and on the basis of other costs and benefits, the various jumbos and air buses present a consistently favorable alternative.¹³ There is reason to question the industry's argument that the combined net worth of the airframe and engine manufacturers is considerably less than the required outlay. The private sector has been able in the past to extend itself comparably, and the conclusion has been drawn that the reason the private sector does not build an SST is simply because it is not worth having, at least compared to its alternatives.¹⁴

It is on the bases, then, of a lag in and dilution of the effect of government's investment; the severity of the inevitable restructuring of the industry; and the stimulation of a questionable investment over superior alternatives, that the SST fails.

¹¹ B. A. Schriever and W. W. Seifert (co-chairmen), *Air Transportation 1975 and Beyond: A Systems Approach* (Cambridge: MIT Press, 1968), pp. 176, 177-78.

¹² Senator Monroney, cited in *Aviation Week*, April 19, 1965, p. 38.

¹³ *Economist*, April 16, 1966, p. 273. SST selling prices and operating costs have been projected at twice those of the 747 (*Monthly Review*, Federal Reserve Bank of San Francisco, June 1966, pp. 121-22).

¹⁴ George W. Hilton, Comments on Stephen Enke, "Government-Industry Development of a Commercial Supersonic Transport," *American Economic Review*, 57 (May 1967), pp. 101-2. Economists who opposed the program during its last year of debate argued the issue of private-sector propriety with growing enthusiasm. Testimony of Princeton's George Eads before the Transportation Subcommittee, Senate Appropriations Committee, August 28, 1970, is representative.

V

Government as a Consumer Proxy

GOVERNMENT'S PURCHASE of goods and services is usually thought of as reflecting needs which are too general for individual expression, and the development of transportation systems is classically representative of goods consumed in such a manner. It can be seen, however, that the government's decision to sponsor the SST, as it had unfolded since 1960, was not an expression of the collective demand of its constituents, but a transaction of a different sort.

A review of the events suggests that there was no specific social need. Indeed, the public can be shown to sustain a sizeable net cost in these developments. The airlines, competitively forced to buy delivery positions at a million dollars apiece, were against it. The military does not need it. Only a part of the commercial transport industry actually pressed for the SST. In short, the specific program originated on the supply side, and it can be called a demand phenomenon only in an imprecise sense. The general program seems not to have been related to supply or demand as such.

After the administration's decision was made, the mechanics of the operation devolved to the Congress. There is little doubt that congressmen who debated the issue in the early 1960s accurately reflected the views of their own industrial constituents. Increasingly, as one reads the testimony before congressional committees, there is an awareness that the logic of the arguments is apparent only when the speakers have names.¹⁵

Once launched, buoyed by continued pressure from the industry, propelled by growing government identification with it, the SST plan became a funded, and thus rigid, organization. It is not difficult to trace the published rationale as it drifted away from international prestige (when that need disappeared in the Cuban missile crisis), and found a new home with the newly-discovered balance of payments.

If the program were an outgrowth of social demand in its usual sense, we would expect to see agitation by congressmen whom we identify with consumers. However, the cast of characters cannot help but lead us to believe that the consensus to which the government responded was a consensus of suppliers. The support of the program by the airlines, which may carry implications for policy and analysis. But that the phenomenon is a function of supply makes it neither more nor less appro-

¹⁵ See especially House and Senate Committees on Appropriations, *Hearings on Independent Offices Appropriations for Fiscal Year 1967*, 89th Cong., 2d Sess., 1966, pp. 1311-1415, and pp. 336-92, *passim*, respectively.

prate. Indeed, it is not unreasonable for a congressman's interests to coincide with those who provide an export base for his constituency and work for its labor force; and, in any case, general equilibrium is not a personal responsibility.

Further, there is the obvious impossibility of collecting a consensus on transport projects such as the SST. Conventional transport may or may not be in the sphere of lay competence, but the ability of the public to evaluate or even to conceive of large technological strides is doubtful. In such cases it seems proper for the innovators to stimulate a demand for their potential supply. Given real-world constraints the injustice is apt to be minimal, and even the SST might be defended on the grounds that there were no clear and suitable alternative means to satisfy the larger purpose: concurrent transport programs were well within the private sector's capability (that is, they looked profitable), military needs were being down-graded, and there was a need to pep up the industry. Given these conditions, the SST may have been the best of a bad lot.¹⁶

Merton Peck and Frederic Scherer, in their study of military weapon system acquisition, concluded with regret that "a market system in its entirety can never exist for the acquisition of weapons."¹⁷ This seems a valid analogy to the case in question: given economic goals that transcended microeconomic considerations, the SST may have to be judged an adequate if unfortunate choice.

VI

Conclusions

THE SST PROGRAM has been viewed as a stepped decision, first to increase government involvement in the private sector in behalf of general economic growth; second, to support the aircraft manufacturing industry; and third, to build a supersonic transport. The third of these steps seems a decision made contrary to the perceived needs of the public in general and the airline industry in particular. Its proponents were so generally biased in favor of the manufacturing sector that we may conclude it was not at all a classic expression of social demand. It is suggested that this case is not atypical of transactions we have categorized as social demand, and that policy and analysis in this area should be re-examined accord-

¹⁶ These decisions predate the DOD's definition of the C-5A project, the subsequent award of which to Lockheed may have given Boeing the edge in the SST competition. They also predate our awareness of the need for a technical breakthrough in *short-haul* commercial aviation.

¹⁷ Peck and Scherer, *op. cit.*, p. 57.

ingly. It is also considered, however, that the effectiveness of phenomena such as the SST as stimulants to economic development is not necessarily diminished by their serving the interests of supply rather than demand.

More generally, it is suggested that optimizing considerations, in the microeconomic sense, may be transcended by activity in behalf of economic development, and that traditional private sector prerogatives may properly be subordinated to government involvement in pursuit of that goal.

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A Memorial for Albert Pleydell

THE BOARD OF DIRECTORS of the Robert Schalkenbach Foundation, which Albert Pleydell served as president and member of the executive committee for many years, adopted the following memorial resolution at its meeting on June 23, 1971:

"RESOLVED, that as Directors of the Robert Schalkenbach Foundation, we record this expression of our profound sorrow at the death of our President, Albert Pleydell, on November 1, 1970.

"His exceptional abilities, his knowledge of public administration, his perceptiveness, his talent for leadership and his unquestioned integrity, hold the admiration and respect of all who knew him, making his loss deeply felt.

"During the years of our association we came to regard him not alone as a dynamic and able business associate, but also as a valued friend, and it is as such that we cherish his memory now, with a warm and abiding affection.

"To his widow, Rose Sixma Pleydell, we extend our deepest sympathies."

Are Landowners Underpaid or Overpaid for Surface Mining Mineral Rights?

Real Investment Values and Original Market Prices of Land in Eastern Kentucky

By HERBERT A. HOWARD*

I

Introduction

THE MINERAL RIGHTS on land being surface-mined in eastern Kentucky were originally sold before the turn of the century for as little as fifty cents an acre. Comments in the press and elsewhere from time to time compare this price to the current-dollar values of these rights. The implication of the statements is that the original seller of the mineral rights was *underpaid*.¹ In this paper, the original owners of the land are shown to have been *overpaid* for the mineral rights.

But are such comparisons meaningful? One may also relate the present value of the 885,000 square miles contained in the Louisiana Purchase territory to the purchase price of \$15 million in 1803. In 1867, Russia received about \$7 million for Alaska—what is the present value of those 586,400 square miles? Mr. "A" inherited an acre located in the downtown area of a large city. His grandfather purchased this land in 1898 for \$10. Can one state that these purchase prices were "too high" or "too low"? The very long spans of time involved in these illustrations make the dollar equivalents irrelevant.

However, if one insists upon bringing present values into comparison with purchase prices, the acquired asset must be evaluated as an investment. Therefore, the question is: How much should an investor have paid around the turn of the century for the mineral rights on land now being mined by the surface method in eastern Kentucky? An examination of this investment in mineral rights is presented below.

* The author is indebted to C. L. Christenson, Professor of Economics, and N. L. Silverstein, Professor of Finance, both of Indiana University, for helpful comments on an earlier draft of this paper while the author was a graduate student at Indiana University.

¹ For example, one of the more recent price comparisons is made by David Nevin, "These Murdered Old Mountains," *Life*, January 12, 1968, pp. 64, 54-67. Price comparisons are also made by Harry Caudill, *Night Comes to the Cumberlands* (Boston: Little, Brown, and Co., 1962). Although the focus is upon rates of taxation, mineral rights values are discussed by Thomas J. Murray, "The Investment Nobody Knows About," *Dun's Review and Modern Industry* (April, 1965), pp. 40-43.

Let us examine the true situation of the mineral rights investment. First, we should make clear what it is that we are comparing. It is not 50 cents to the present market value of the several thousand tons of coal which can be mined from an acre of land. But rather, the comparison is between what the 50 cents originally purchased—the right to mine the minerals—and the market value today of that same right. That is, if one presently owned the mineral rights of a certain parcel of land, he could lease to a coal operator the privilege of mining the minerals—for eastern Kentucky this is mainly bituminous coal. For this prerogative the operator would pay a specified amount per ton removed. For the examples below, we will use the values from 20 to 50 cents per ton. While the 1968 market prices were within this range, only bituminous coal of the relatively higher ranks could demand a price in the upper part of this price spread.

II

The Assumptions

WE SHALL ADOPT the more liberal assumptions concerning the amount of coal which can be obtained by the strip and auger mining methods in eastern Kentucky. One cannot mine the entire area of a 10-, 50-, or 100-acre tract of land selected at random in this region. The more usual situation is that only a fraction of the total area would be mined, for example, only around the contour of a hillside.

Some land in eastern Kentucky contains more than one coal seam, but for the examples herein, we shall assume that an acre of land yields an acre of coal from one seam. The thickness of the coal seam is an important variable in the determination of the total amount of coal which can be obtained from a given area. Even in strip mining, the rate of coal recovery from any given seam is less than 100 per cent; augering results in an even lesser rate of recovery. However, we will here assume a 100 per cent rate of recovery. In 1968, the average thickness of the coal seams mined by surface methods in eastern Kentucky on land which had separate ownerships of the surface and the minerals was approximately 4 feet, 9 inches.² Such a seam thickness, based upon a specific gravity of 1.32, will yield approximately 8,550 tons of bituminous coal per acre.

INCOME TAXES ARE IGNORED in this analysis. Since depletion allowances have no meaning in the absence of these taxes, they, too, are disregarded. The purchaser in 1886 surely did not consider income taxes. While the 1914 buyer witnessed the passage of the Sixteenth Amendment, it is

² This figure was developed by the author in other research.

doubted that he could correctly appraise its implications. A consideration of such taxes would merely strengthen the argument since present-day income taxes reduce current income.

With the foregoing assumptions, the owner of the mineral rights would hold an investment with a current-dollar value dependent upon the present market price per ton of coal leases in eastern Kentucky. Today's dollar value, however, must be adjusted in two respects before it can be brought into a meaningful relation with the dollar value in another time period.

III

The Necessary Value Adjustments

FIRST, A VALUE STATED in current dollars does not take into consideration any changes in the price level. An adjustment must be made (1968-dollar values were chosen) to make them directly comparable with earlier dollar values. The Wholesale Price Index published by the Department of Commerce is used here for reconciling price levels. The Consumers' Price Index could appropriately be used in lieu of the Wholesale Price Index in these calculations. The owner of the mineral rights is concerned, after all, with the purchasing power of his dollars. But the Department of Commerce has not calculated the Consumers' Price Index for the years before 1913. We may assume, however, that it would be close to that of the Wholesale Price Index, since both, for example, are 38.0 for the year 1916. The 1968 Wholesale Price Index is 108.7. Since the 1968 Consumers' Price Index is 121.2, its use would merely further devalue the per-acre prices. The intent here is to use those calculations which will result in the comparatively higher values.

Second, a current value even after adjustment for changes in the price level does not indicate the investment worth of mineral rights at any other point in time. A rate of return or discount rate must be brought into the calculations to accomplish the necessary rectification. Two different rates—12 and 15 per cent—are used in the calculations. The rationale for the selection of these rates is given below. For the purpose of examining the original values of eastern Kentucky mineral rights, we assume two different original purchase dates—1886 and 1914. From these base dates the spans of time through 1968 are 83 and 55 years, respectively.

These discount rates include only the pure rate of interest plus an allowance for financial risk. The rates could be increased approximately 2 per cent to include the risk of inflation. In the calculations, however, the Wholesale Price Index serves as a proxy for this risk.

TABLE ---1886 Values of Eastern Kentucky Mineral Rights After Adjusting Price Level Changes and Application of Discount Rates of 12%			
(1) 1968--Dollar Lease Price Per Ton of Bituminous Coal	(2) 1968--Dollar Value Per Acre ^a	(3) 1968--Value Per Acre (in 1886 Dollars) ^b	(4) 1886--Value Per Acre of Mineral Right (1886 Dollars) Discounted at 12%
\$0.20	\$1,710.00	\$ 471.94	\$0.039
0.30	2,565.00	707.91	0.058
0.40	3,420.00	943.88	0.077
0.50	4,275.00	1,179.85	0.097

^aBased upon an acre of coal 4 3/4 feet thick, at specific gravity 1.32, yielding 8,550 tons per acre and a 100 per cent recovery.

^bAfter adjustment for price level change only.

The equation for discounting at 12%--For example, second line, column 4.

$$1886\text{--Value Per Acre (in 1886 dollars)} = \sum_{t=1}^{55}$$

55

t=1

IV

The Analysis

COLUMNS 1 THROUGH 3 of Table 1 indicate 1968 dollar lease prices per ton of bituminous coal in the range from 20 to 50 cents, the 1968 dollar value per acre, and the 1968 value per acre in 1886 dollars (after deflation by the applicable Wholesale Price Index number). The Department of Commerce Wholesale Price Index number for 1886 is 30.0 (1957-59 equals 100).³ The number for 1968 is 108.7.

Let us assume the 1968 lease value of the mineral rights for some tract of land in eastern Kentucky is 30 cents per ton—totaling \$707.91 per acre of coal after adjustment for price level changes (in 1886 dollars). The question to be answered now is what would or should an investor have paid for this income-producing asset in 1886. Comments on this subject by both Harry Caudill and David Nevin indicate that the price of 50 cents per acre was paid for mineral rights in the late 1800s.⁴ Assume that the mineral rights were originally purchased at the beginning of 1886 and the coal was mined by a mineral rights lessee at the end of 1968—a period of 83 years. The answer to the question of the 1886 value will depend upon the rate of return an investor expected to receive on such investments made in that year. One must remember that in 1886 eastern Kentucky was even more isolated than today. Transportation facilities for the removal of any mined minerals were essentially non-existent. Even a good estimate of when the minerals would actually be mined could not be made. During the 1880-1899 period first mortgage railroad bonds were paying a 6 to 7 per cent return;⁵ New York City real estate mortgages were made at an average rate of 5.38 per cent in the same period.⁶ In 1914 New England high grade municipal bonds yielded an average return of 4.37 per cent.⁷ After the turn of the century, A. S. Dewing suggested that even medium risk investments have a return from 12½ to 16-2/3 per cent.⁸ Therefore, a 12 per cent rate of return on an investment in eastern Kentucky mineral rights is considered conservative.

With the above assumptions concerning coal production per acre (8,550

³ U. S. Department of Commerce, Bureau of Census, *Long Term Economic Growth 1860-1965, A Statistical Compendium ES4-No. 1*. Washington, 1966.

⁴ See footnote 1 above.

⁵ E. L. Smith, *Common Stocks as Long Term Investments* (New York: Macmillan Co., 1923), p. 127.

⁶ S. Homer, *A History of Interest Rates* (New Brunswick, N. J.: Rutgers University Press, 1963), p. 288.

⁷ *Ibid.*, p. 341.

⁸ A. S. Dewing, *Corporation Finance* (New York: Macmillan Co., 1922), p. 54.

TABLE 2--1914 Values of Eastern Kentucky Mineral Rights After Adjusted Price Level Changes and Application of Discount Rates of 15%			
(1) 1968--Dollar Lease Price Per Ton of Bituminous Coal	(2) 1968--Dollar Value Per Acre ^a	(3) 1968--Value Per Acre (in 1914 Dollars) ^b	(4) 1914--Value Per Acre of Mineral Right (1914 Dollars) Discounted at 15%
\$0.20	\$1,710.00	\$ 586.78	\$1.15
0.30	2,565.00	880.17	1.73
0.40	3,420.00	1,173.56	2.30
0.50	4,275.00	1,466.95	2.88

^aBased upon an acre of coal $4\frac{3}{4}$ feet thick, at specific gravity 1.32, yielding 8,550 tons per acre and a 100 per cent recovery.

^bAfter adjustment for price level change only.

The equation for
discounting at
15%--for example,
fourth line,
column 5.

$$1914\text{--Value Per Acre (in 1914 dollars)} = \sum_{t=1}^{55}$$

55

t=1

tons), the time period (1886–1968), and the rate of return (12 per cent), we find that if the current lease price per ton of coal is 30 cents, the original purchaser of the mineral rights should have paid only 5.8 cents per acre—not 50 cents. Column 4 of Table 1 shows the 1886 values of these mineral rights when different 1968-dollar lease values per ton are used. One may consider a 12 per cent rate of return “too low” for this type of an investment. Column 5 of Table 1 indicates the 1886 per acre values when a 15 per cent rate is used. The amounts in Column 5 point out even more impressively than those in Column 4 the relatively low value of this investment in 1886.

Harry Caudill states that the selling price of mineral rights in eastern Kentucky rose after the turn of the century. By about 1913 the price paid to landowners for such rights had mounted to \$5.00 per acre.⁹ Basing computations on the time period from the beginning of 1914 and the other assumptions above—average coal seam thickness of $4\frac{3}{4}$ feet, 100 per cent recovery rate, every acre yielding an acre of coal—we can ascertain the 1914 values of an investment in eastern Kentucky mineral rights. The computations for the price level change adjustment for this 55-year period are shown in Column 3 of Table 2. The Wholesale Price Index number for 1914 is 37.3 (1957–59 equals 100). Columns 4 and 5 of Table 2 show the per acre values of the mineral rights after the discount rate adjustment. It is significant that even when the lower of the two rates of discount is used in the computation, the highest 1914 value of the mineral rights—\$2.88—does not come near the 1914 purchase price of \$5.00.

The liberal assumptions used in the above analysis—a 100 per cent recovery rate and any acre of land yielding an acre of coal—are, of course, unrealistic. When more representative conditions are introduced such as a somewhat less than 100 per cent recovery rate and an acre of land yielding less than an acre of coal, it is even more evident that investors paid “too much” for the mineral rights in eastern Kentucky. The landowners were grossly overcompensated.

While eastern Kentucky mineral rights have been examined only as an investment, other facets of these rights exist. There is a legal question surrounding the current validity of some provisions contained in the broad form land deed. In addition, a social problem endures in eastern Kentucky which has some of its roots in the separation of the ownerships of surface rights and mineral rights.

⁹ Caudill, *op. cit.*, p. 74.

A more thorough financial analysis of eastern Kentucky mineral rights since 1886 would include a greater number of details than set forth here. No mention has been made of the underground mines in that area which produce more total tons of bituminous coal than do the surface mines. Moreover, mineral rights have in many cases changed ownership several times since their original purchase. Many such transfers took place in the 1930s. During this period of economic depression, some holders of mineral rights became bankrupt; others disposed of their properties. But the comparisons of values often made today do not mention these years of change and adjustment.

V

Conclusions

A COMPARISON of the purchase price to the current value of land rights loses its significance over very long spans of time. The 1886 and 1914 purchase prices of eastern Kentucky mineral rights, just as the 1867 purchase price of Alaska, should be regarded as irrelevant dollar amounts. A meaningful analysis must be confined to the current values of surface and mineral rights, the current depletion allowances and taxes, the current social problems, and the current risks.

However, *if* a person insists upon comparing the present value of the mineral rights on land suited for surface mining in eastern Kentucky to the original purchase prices around the turn of the century, his only conclusion is that the original landowners were *overpaid*. The buyers of the mineral rights in eastern Kentucky in the late 1800s and early 1900s, from an investment standpoint, either did not calculate their rates of return very carefully or were too optimistic in their expectations.

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Land Price Inflation

DURING THE 20-YEAR PERIOD 1950-1970, residential land prices in the United States rose between 400 and 500 per cent while general prices increased 60 per cent, according to a study by Sylvan Kamm, urban growth and redevelopment consultant, in the September, 1971 issue of *Urban Land*.

Water Resource Development: Some Institutional Aspects

*A Case History of Montana**

By CHENNAT GOPALAKRISHNAN

THE RAPIDLY INCREASING DEMAND for water, coupled with its comparatively limited supply, has made it an "ocean-sized" problem in the United States in recent years. The situation is acute, especially in the chronically water-short western regions. The extent of the problem will become all the more clear when we examine closely the sharp rise in the demand for and use of water in the past few years and relate it to the potential for increasing water supply. The demand for water for different uses has actually been increasing at a much faster pace than the increase in supply, particularly in the western United States. This imbalance in the supply-demand situation contains within itself the elements of a "coming water famine" which calls for the adoption of a series of corrective measures.

The strategic role of water in the development of the arid and semi-arid regions is perhaps nowhere more manifest than in the institutional factors governing its control and use. The purpose of this paper is to focus attention on some of the institutional impediments related to Montana's water resource development and indicate how these institutional aspects have considerably slowed down the optimum development of the state's water resources.

I

The Legal Framework

IN MONTANA the ownership, control and use of both surface and ground-water are governed by the doctrine of prior appropriation. Consequently, the system of water rights there suffers from some of the basic weaknesses of the appropriation doctrine: (1) the system is inflexible. This stems from the freezing of rights in terms of the original appropriation. A certain degree of rigidity occurs if appropriation rights cannot be severed from the land on which the water is applied and are limited to the purpose for which it was originally diverted. This rigidity may result in economically or socially unsound water use. For example, the prior appropriation of much of the available water for irrigation hampers the re-allocation of water to urban and industrial uses. (2) The heavy emphasis on

* Presented at the Third American Water Resources Conference held in San Francisco, November 8-10, 1967.

priority often results in considerable waste. The conditions under which the original appropriation took place change frequently. Consequently, the water appropriated may no longer be needed in the amount, or at the place, or for the purpose specified, although the appropriator still continues to enjoy fully his right of use. (3) In spite of the doctrine of state administration, actual management is often vested with local water commissioners appointed either by county governing bodies or by irrigation district boards, the state official nominally responsible merely giving approval to the appointments. "This is not a particularly reliable process for bringing expertise to bear on a state program."¹

More specifically, the following drawbacks have been pointed out in the Montana system of water rights:

(1) The present system of appropriation by notice-posting and determination of rights by private suits, in which it is not necessary to join all parties concerned, is regarded as outdated. Where centralized systems exist, usually the supervision and control of the state is exercised through the state engineer or an administrative agency. The function of the courts in such cases is normally limited to deciding questions of priority of appropriation or appeals from administrative decisions. Montana has an administrative agency, the State Water Conservation Commission,² and needs only to have the legislature broaden the scope of its activities.

A first step in this direction was taken in 1939 when the state engineer was empowered to sue for adjudication of streams. However, the system is still administered by water commissioners appointed by local courts and records are required to be filed in the office of the clerk or the court concerned. Montana's primary need in the field of water law, according to legal experts, is a centralized system of administration designed to regulate the determination of existing rights, the distribution of water among those entitled to its use, and the acquisition of new rights. Such an arrangement will be of considerable help in the transfer of water from a less-productive to a more-productive use and also from one user to another.³

(2) Montana rules specify that to constitute abandonment in that state there must be concurrence of relinquishment of possession, and intent not to resume it for a beneficial use. Most of the other western states have,

¹ Roscoe C. Martin, *Water for New York* (Syracuse, N.Y.: Syracuse University, 1960), p. 112.

² The office of State Engineer has been abolished in Montana and its duties transferred to the Montana Water Conservation Board.

³ Howard W. Heman, "Irrigation Law," *Montana Law Review*, 10 (Spring, 1949), p. 13.

usually three to five. But there is no such provision in Montana law.⁴ Viewed in a context of ever-increasing demand for water, this uncertainty would only contribute to a reduction in the efficiency and expediency of water use.

(3) Montana law provides that to ripen into a prescriptive title, there must be a continuous, exclusive, uninterrupted, notorious and adverse use of the water under claim of right throughout the statutory period, a result difficult to attain in a state where water flows in many stream-beds only in certain months of the year. The problem may be further complicated sometimes by drouth which may prevent some streams from containing any water for years.⁵ This indicates that in order to devise an efficient system of water administration within the state, it is essential to bring about substantial alterations in the existing provisions concerning prescription.

Stone points out that,

Montana is limited in developing her water resources by laws and administrative patterns which were formed before Montana became a state. No law enables Montana to develop multi-purpose projects, or to give recognition, and thereby lay the basis for a claim, to some of the uses of water which do not entail storage or diversion. Neither is the public interest represented in the development of new uses or applications of water in Montana.⁶

II

Conservancy Districts

AN IMPORTANT INSTITUTION which merits special consideration is the Conservancy District. The question of Conservancy Districts has taken on a new importance in Montana not only because of its economic implications, but because of its somewhat intriguing, political ramifications.

Although Montana does have a number of special districts to serve a variety of purposes, it does not have even a single Conservancy District at present. What is more important is the fact that the state does not have even an enabling act which permits the establishment of Conservancy Districts.

Virtually all these special districts are single purpose in nature. A unique feature of the Conservancy District which distinguishes it from other special districts is that it is essentially multiple-purpose in nature. The setting up of multiple purpose Conservancy Districts in Montana is designed to conserve and develop Montana's water resources for flood

⁴ *Ibid.*

⁵ *Ibid.*, p. 30.

⁶ Albert W. Stone, "Problems Arising out of Montana's Law of Water Rights," *Montana Law Review*, Vol. 27, No. 1 (Fall, 1965), p. 1.

protection, river control, drainage, water storage, irrigation, industrial and domestic use, waste disposal, pollution control, recreation and other beneficial purposes.

Several western states have already established Conservancy Districts. Conservancy Districts were authorized by the Colorado Legislature as far back as 1937. Colorado has the general enabling act type of legislation. At present Colorado has 32 Conservancy Districts. North Dakota formed the Garrison Diversion Conservancy District in 1955 by a special act of the state legislature. Montana is one of the few states in the western region which does not have any provision for an enabling act to create Conservancy Districts.

All these districts have as their basic objective the multiple-purpose development of their water resources.

They supplement rather than replace other types of legal organizations that are established for water resource development such as irrigation districts and others. More and more the Conservancy District type of organization is being recognized as the answer to two of the perplexing problems encountered in the problems of today's more complicated water resources projects, namely (1) the financing of the local share of more costly projects being constructed today, and (2) providing the local administrative machinery through which the various interests in a multiple purpose water resources development can be represented.⁷

There is a strong need for the creation of Conservancy Districts in Montana. Small water projects could be developed in Montana if it were possible to enlist the cooperation of all the beneficiaries involved. The easier-to-build and cheaper projects were first built in the state, chiefly as single-purpose projects.

There has been very limited state and local development of water resources in Montana in the course of the past ten years or so. A principal reason for this is the fact that single purpose projects (such as those constructed by irrigation, drainage, county water, and soil and water conservation districts) do not permit adequate financing.

The justification for the development of more water resource projects now extends beyond the cultivation of crops on the irrigated lands. The creation of Conservancy Districts could result in a number of benefits like flood control, regulation of stream, improvement of riparian lands, recreation, conservation of water resources and related lands including fish and wildlife preserves, industrial development, municipal or domestic water supply, and the watering of livestock. It was this need for

⁷ "The Garrison Conservancy District." Prepared by Garrison Conservancy District, N. D. (Unpublished).

multi-purpose approach toward water resource development at a local level that resulted in the demand for the establishment of Conservancy Districts.

A bill designed to create Conservancy Districts was introduced in the 1967 Montana State Legislature. The bill was passed by the Senate with an overwhelming majority—46 members voted in favor of it out of a total of 55. However, the bill was defeated by the House, with 49 members voting against the bill and 46 members in favor of it.

The bill's defeat was attributed by knowledgeable circles to the "politics of water" in Montana. Some legislators have characterized the "killing" of the bill by the House "the high crime of the 40th Legislature." According to the *Great Falls Tribune*, a widely circulated newspaper published in Montana, "the 40th Legislative Assembly may well be known as the session that pulled the plug on Montana's future water supply."⁸

In any case, the defeat of the Conservancy District legislation points to the crucial role played by political factors in the overall institutional complex governing the water resource development of Montana.

III

Role of State Agencies

A NUMBER OF REFORMS are possible in the case of the state administrative agencies concerned with water development problems. In the first place, these agencies are handicapped by an acute dearth of funds. The State Legislature does not appear to be in any hurry to grant appropriations in adequate amounts to enable the various state agencies to undertake water development activities within the state. Second, a pronounced lack of coordination exists between the activities of the various state and local groups engaged in water development. For example, it is well known that the State Water Conservation Board and State Fish and Wild Life Commission often are not on particularly friendly terms. Third, some of the agencies are rather sluggish in implementing water development activities. Thus, the Montana Water Conservation Board had developed 181 small water development projects by November, 1966,⁹ the same number as it had developed at the end of June, 1960.¹⁰ In other words, over a period of more than six years the Board did not construct a single water conservation project.

The extreme reluctance on the part of the state government to allot funds for the conduct of water research has slackened the pace of urgently

⁸ Editorial, the *Great Falls Tribune*, March 6, 1967.

⁹ Montana State Water Conservation Board, *Summary of the Activities from Inception on January 22, 1934 to June 30, 1960* (Helena, Montana. March, 1961).

¹⁰ The *Bozeman Chronicle*, November 18, 1966.

needed research. Adjoining states have already launched major programs to estimate their future needs. Dr. Roy Huffman pointed out recently that Montana has not appropriated a single cent to the University-based Water Resources Research Center. In sharp contrast, Washington, Oregon and Idaho have appropriated large amounts to promote water resources research. For example, Washington is spending about \$180,000 for an integrated study of water resources. Oregon is spending \$743,000 for three different studies, and Idaho which created a Water Board as late as 1965 is providing over \$125,000 for water resources research.¹¹ These figures should, if anything, act as an eye-opener to the Montana planners and provision should be made in the future legislatures to appropriate a substantial amount for the conduct of comprehensive water planning and research. Time is running out and unless prompt measures are taken Montana may find itself deprived of a large part of its water by other downstream users who have established beneficial use of the state's waters.

IV

Role of Federal Government

ANOTHER INSTITUTIONAL FACTOR closely related to the problem of water resource development concerns the attitude of the general public toward federal participation in water projects. Large numbers of citizens in Montana look down upon any form of federal involvement as detrimental to the well-being of the state. It is often argued, even by knowledgeable persons, that federal participation invariably leads to a curtailment of freedom on the part of the people of the state and deprives them of some of their cherished "rights and privileges." However, this type of argument is steadily losing ground and there is a rapidly increasing awareness of the role of federal government in the areas of state resource development.

Renne has indicated the strategic role of federal activities in the water resource development of Montana.¹² He refers in this connection to six major pieces of legislation passed by the Congress in the past two years. Six of these, which are likely to have a marked bearing on Montana's economy, are: The Water Quality Act, the Solid Waste Disposal Act, the Land and Water Conservation Fund Act, the Federal Water Project Rec-

¹¹ In an interview in the *Billings (Mont.) Gazette*, February 18, 1966. Dr. Huffman, vice president for research at Montana State University, was then director of the university's Water Resources Research Center. Cf. his *Irrigation Development and Public Water Policy* (New York: Ronald Press, 1953).

¹² In an address in Bozeman, Mont., reported in the *Bozeman Chronicle*, February 18, 1967. (Dr. Renne, author of *Land Economics*, New York: Harper Brothers, 1947, now head of a major AID-sponsored water resource program in India, was director of the U.S. Office of Water Resources, 1966-69).

recreation Act, the Water Resources Research Act and the Water Resources Planning Act. These six acts provide federal cooperation, technical assistance, and funds to state and local governments by which major improvements can be effected.

A brief indication of the impact of the 1965 Water Resources Planning Act on the federal government programs will make this clear. Under the new federal law which provides financial assistance to states, Montana will receive about \$100,000 a year on a matching 50-50 basis to carry on comprehensive planning of its water development.¹³

The Water Resources Research Act makes available direct grant funds on a nonmatching basis for the establishment of research centers. These funds amount to \$75,000 the first year, \$85,000 the second year, and \$100,000 during the subsequent years.

The most important recent development, perhaps, is the approval by the National Water Resources Council of the establishment of a regional water planning commission for five Pacific Northwest States, of which Montana is one.¹⁴ And the Water Resources Council which has approved the formation of this Commission is also the result of the national Water Resources Planning Act.

V

Conservation vs. Dam Building

IN VIEW of the potential importance of water-based recreation to Montana, a controversial aspect of recreation development has to be examined carefully. This relates to the long-standing controversy between preservationists and the federal agencies responsible for the construction of dams and reclamation of land (the Corps of Engineers and the Bureau of Reclamation). The feuds between these two groups have greatly slowed down the tempo of water-resources development.

The extreme view held by some conservationists that all dam construction is detrimental and potentially damaging to wilderness, wildlife, and scenic beauty is certainly untenable.

The fact of the matter is that most of the dams and reclamation projects do contribute to the development of recreation.

Reclamation, in storing the spring runoff and regulating our streams for the public benefit is not the great destroyer, but in fact consistently improves the rivers for all purposes including recreational uses and enjoyment of natural beauty.¹⁵

¹³ *The Bozeman Chronicle* (from the report of a speech by Roy Huffman), February 18, 1967.

¹⁴ *The Bozeman Chronicle*, November 18, 1966.

The majestic scenery surrounding Lake Mead (Nevada) and Lake Powell (Arizona)—both Bureau of Reclamation Lakes—give support to this view.

However, the view held by some building agencies that the enjoyment and pleasure derived from viewing beautiful scenery, wilderness areas or wild rivers are only of secondary importance if they do not contribute any tangible earnings is not justifiable. To quote the British economist, Joan Robinson:

The fight that has to be put up, for instance, to keep wild country from being exploited for money profit is made more difficult because its defenders can be represented as standing up for 'non-economic' values (which is considered soft-headed, foolish and unpatriotic) though the economist should have been the first to point out that *utility*, not money, is economic value and that the utility of goods is not measured by their prices.¹⁵

Viewed in this perspective, the idea of preserving stretches of certain rivers as wild rivers can be justified in economic terms. Hence, the argument against the selection of stretches of the Flathead and upper Missouri Rivers to be included in a national system of wild rivers on the ground that they do not make any contribution of economic value loses strength.

These, then, are some of the institutional blocks in addition to legal handicaps which slow down the tempo of Montana's efforts to maximize the efficiency of its water use. A determined effort on the part of enlightened Montanans to remove these institutional bottlenecks should contribute immensely to the state's water development.

V

Conclusion

THE SUCCESS of a program of water resource development thus depends not merely on economic considerations but on a host of institutional factors as well. The search for efficiency in water utilization through water transfer can be successful only if these institutional aspects are reckoned with. In order to overcome most of the major institutional blocks—in addition to removing the legal and administrative handicaps—concerted efforts should be undertaken to educate people at the "grass-roots level." The results of technical research have to be passed on to the general public in a form that is fully comprehensible to them.

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¹⁵ Floyd E. Dominy, Commissioner of the Bureau of Reclamation, in an address. *Bozeman Chronicle*, November 17, 1966.

¹⁶ Joan Robinson, *Economic Philosophy* (Chicago: Aldine Publishing House, 1963), pp. 131-32.

The idea of class conflict presupposes a divergence of interests, a heterogeneity in life style. It is on this misunderstanding that slogans like 'the greatest good of the greatest number' have been coined, so it is logically concluded that the good of all, due to a divergence of interests, is not possible. Hence tensions and conflicts in industrial relations are taken as the normal course.

The Communist is convinced that 'conflict' is the very essence of progress. He uses the tools of a materialistic interpretation of history to prove his point. He suggests to his labor friends that if they want to improve their condition and establish the dictatorship of the proletariat, they must not insist that the means they use be pure. The end justifies the means. This philosophy has not only been accepted in the Communist and fellow-travelers' world but it has also won a good number of friends in the other world, as this preachment comes in handy for serving selfish ends. But it has within it—to use the Marxist terminology—the seeds of self-destruction. So we see labor-capital strife taking very ugly turns, as Aldous Huxley has pointed out⁶. Leadership, whether of labor or capital, can either fan the flames or extinguish them.⁷ If the leader is ambitious, selfish, mean and unwise, violence and strikes will become events of frequent occurrence. On the other hand, a sober and disciplined leader, wedded to the goal of labor's all-round development, will try to minimize the area of conflict. History bears testimony to this claim.

Thus industrial peace has been disturbed, according to experts from the West, because of a concentration of power and wealth; neglect of 'human producers of profit; loss of personal contact between the employer and the employee and consequently wrong selection, placement, training and facilities for workers; prejudiced minds; no effort to understand human nature and develop it; insistence on rights and neglect of duties; indifference toward the morality of means; poor leadership and the presumption of a divergence of interests.

II

MODERN EXPERTS, seeing the deterioration of labor-capital relations, the disturbed state of industry and the price which nations are paying for the loss of social tranquility, have tried to remedy the evils. However, an examination of industrial relations in the different types of political and social systems of which we have contemporary experience—capitalism; communism, socialism, Nazism, Fascism—indicates that the problem has continued to persist and even grown.

⁶ A. Huxley, *Ends and Means* (London: Chatto & Windus, 1948), p. 52.

⁷ G. D. H. Cole and Margaret Cole, *A Guide to Modern Politics* (London: V. Gollancz Ltd., 1934), pp. 348-49.

For example, in capitalist economies, "in spite of growing interference by the State in the passage of an ever-increasing number of labor laws, plus bonuses, profit-sharing, participation in management and other private welfare schemes, the relations between labor and capital continue to be bad and the parties are still pitted against each other like sworn enemies. Communism tried to solve the dispute by eliminating one party to it, the private owner. But in doing so it seated an even more powerful enemy upon the throne, in the form of State Capitalism,⁸ which has robbed labor of all freedom and uses labor unions to strengthen its own position. The inequalities of income continue to exist."⁹ The idea that the State will 'wither away' still remains a very distant goal. Stalin had this explanation for the disappointed: "The State cannot wither away in a single socialist country before the world revolution because of the necessities imposed by capitalist encirclement."¹⁰ Nazism and Fascism also failed; they, like Communism in power, have ruthlessly suppressed labor. Socialism, whether democratic or otherwise, being neither this nor that, has also not achieved anything spectacular so far.¹¹ Candor compels this admission though one is not inclined to belittle the experimentation in the Scandinavian countries.

II

WHAT, THEN, is the Gandhian technique for establishing and maintaining peaceful industrial relations? A study of Gandhi's scattered writings, utterances and actions gives clues to his way of thinking. Let us examine them here briefly.

Mahatma Gandhi's association with labor dates back to 1906 when he took up the cause of indentured Indian laborers in South Africa. It was because of his efforts at home in India that the Indian Emigration Act, which had legalized the indenture system for Indian laborers, was repealed. The exploitation and misery of indigo peasants of Champaran were put to an end and Satyagraha of Kheda (Gujarat) peasants and the strike of Ahmedabad mill workers were led to successful conclusions.

It was Gandhi who, for the first time in India, organized a labor union at Ahmedabad along non violent lines and gave a new impetus and direction to the labor movement of the country. Among the political leaders

⁸ Huxley, *op. cit.*, p. 50.

⁹ Richard B. Gregg, *Which Way Lies Hope* (Ahmedabad: Nav Jivan Publishing House, 1952), p. 102.

¹⁰ Quoted in *The Strategy and Tactics of World Communism* by the U. S. Senate Committee on Foreign Affairs (Washington: Government Printing Office, 1948), p. 12.

¹¹ P. A. Sorokin, *The Reconstruction of Humanity* (Bombay: Bhartiya Vidya Bhawan, 1958), p. 31.

it was he who was ever keen to associate himself with even the most down-trodden of laborers and, therefore, started calling himself a *Harijan* (i.e., an untouchable). All this made him the uncrowned king of the Indian laborers, agricultural, factory or whatever kind. His associations with the biggest industrialists of the country are well known. He became an advisor to most of them and his advice became the last word to many, especially to Jamna Lal Bajaj and the Birla brothers. It can, therefore, be safely said that Gandhi's views on labor-capital relations were neither imaginary nor idealistic. They cannot be dismissed lightly as they were based on his intimate knowledge of both labor and capital and on much study of the problems of their relations. It is quite clear, too, that he was well-informed on the Western outlook, thinking and efforts.

Gandhi wanted to get rid of the very basis of labor-capital conflict by calling a halt to the mad craze for machines and automation¹² and by organizing production along non-violent lines. The bulk of production, he believed, could be carried on in the private sector through small scale units; a part of it in a Trusteeship Sector to which would be assigned those units that had been misbehaving; and the rest in a Public Sector consisting of large scale enterprises of basic, key and public utility industries.¹³ Obviously when the size of a plant is small, the power to exploit labor will accordingly be less and the opportunities for labor and management to know each other and cooperate will be greater. This decentralization of power and consequently of wealth will go a long way in restoring permanent peace and amity in industrial relations. The experiments in decentralization that are going on in Sweden, Japan and Switzerland and the opinion of Henry Ford¹⁴ bear testimony to the correctness of Gandhi's views and show which way the wind, even in the West, has started blowing.

Gandhi was against unlimited material progress. He was of the confirmed opinion that material progress and happiness part company after a certain minimum of the former has been achieved. His memorable lecture on December 22, 1916 in Muir College still rings in one's ears. He reminded his audience that material progress beyond a limited scope does not promote real progress but retards it. He repeated the theme numerous times.¹⁵

When the emphasis on unlimited material progress and excessive selfish-

¹² S. S. Gupta, *The Economic Philosophy of Mahatma Gandhi* (New Delhi: Ashok Publishing House, 1969), pp. 13-38.

¹³ *Ibid.*

¹⁴ See M. R. Masani, *Cooperatives in Planned Economy*, Bombay, p. 11.

¹⁵ G. D. Tendulkar, *Mahatma*, Vol. IV, Vithalbhai K. Jhaveri and G. D. Tendulkar (Bombay: 1952). *Yerveda Mandir*, p. 34. *Hind Swaraj*, August, 1936. *Harijan*, August, 1936.

ness shifts to reasonable material progress and human happiness, nine-tenths of the trouble will automatically vanish. John A. Hobson rightly felt that the evils of capitalism are, really speaking, the evils of 'impropriety.' With a view to removing the improprieties, Gandhi wanted to fix both the maximum and minimum limits of income. He wanted laborers to be assured a 'living wage.'¹⁶ Explaining what he meant by a 'living wage,' he told the All Indian Village Industrial Association:

We should ensure all workmen with whom we deal, a wage which would give them a balanced and reasonable diet. That a meal may cost an anna and a half in Bihar and four annas in Gujerat and six in Bombay was a different question. . . . A balanced diet must be devised.¹⁷

Probably his method of calculating this living wage resembled the method followed by the Trade Boards and Wage Boards in the United Kingdom.

Gandhi was asked whether, when a laborer works in a factory, the minimum wage should be a living wage for him alone or for his family, too. Gandhi was a keen observer of human psychology. He knew that the needs of a laborer, who has a familial instinct, can never be satisfied until he is able to feed the members of his family properly. Gandhi, therefore, opined that the living wage must be sufficient for the laborer's family also.¹⁸

It is important to note here that Gandhi did not want "anything more for workers and peasants than enough to eat and house and clothe themselves and live in ordinary comfort as self-respecting human beings."¹⁹ The logic is clear. Any wage beyond this living wage will not promote human happiness and will result in a never-ending struggle between labor and capital.

But when the laborers are paid only a living wage, then the mill owners cannot be allowed to live in unlimited luxury.²⁰ To begin with, the difference can be only a maximum of 1 : 20.²¹ Then, as the nation progresses towards the ideal, the differences should be scaled down, not by increasing the income of the laborers but by reducing the income of those better off. Is it not the ideal socialism?

Gandhi was a firm believer in unity of life. Class collaboration and not class struggle was his objective. With reference to industrial rela-

¹⁶ *Harijan*, February 13, 1937.

¹⁷ R. N. Bose, *Gandhian Technique and Traditions* (Calcutta: Research Division, All India Institute of Social Welfare, 1956).

¹⁸ *Ibid.*, p. 48.

¹⁹ *Young India*, April 2, 1931.

²⁰ Pyare Lal, *Gandhian Technique in the Modern World* (Ahmedabad: Nav Jiwan Publishing House, 1953), p. 31.

²¹ *Report of the Economic Program Committee*, All India Congress Committee, 1948, p. 43.

I have always said that my ideal is that capital and labor should supplement and help each other. They should be a great family living in unity and harmony.²²

Gandhi felt that conflict arises when one wants to appropriate more than one needs. Greed is at the root of it. With a changed outlook and restrictions on greed, the area of conflict will automatically narrow down. Moreover, a feeling that others are not important and an exaggerated notion about one's importance also breed conflict. Gandhi, therefore, wanted to make both labor and capital realize that each is ineffective without the other. To laborers he said:

Labor possesses the key to production but lacks talents to run the mills. You could not run it even if you had a million rupees.²³

And to the employers he issued this warning:

Capital would be helpless without labor. All mills would be at a stand-still, if laborers were not there to work them. There is no doubt that you are helpless without labor.²⁴

So Gandhi advised both to work in harmony.²⁵ He therefore pleaded for the participation of labor in the management.²⁶ It was with this background that Gandhi suggested to the employers that they offer laborers full control of the concern in the case of a strike. He felt that it would disarm opposition and win sympathy for the employer and ultimately turn out to be in his own interest. This psychological move would satisfy, to a very great extent, the acquisitive nature of the laborers and relieve tension. The Scanlan Plan of the United States and the experiments of Yugoslavia, West Germany, France, Sweden and the United Kingdom in workers' participation in management have started with this purpose in view.

III

GANDHI WAS GREATLY INFLUENCED by John Ruskin and Leo Tolstoy. He, therefore, became a believer in the Law of Bread Labor. He felt that when a millionaire has to "induce hunger by taking exercise," when one gets tired if "he rolls in his bed all day long," when "nine-tenths of humanity lives by tilling the soil" and when the neglect of the golden rule has created complexes of superiority and inferiority and invidious distinctions of rank," it will be ideal if the remaining one-tenth starts earning its living by bodily labor.²⁷ Love for bread labor will obliterate

²² *Young India*, August 28, 1925 and May, 10, 1928.

²³ *Harijan*, November 7, 1936.

²⁴ *Ibid.*

²⁵ *Ibid.*, March 31, 1946; *Young India*, August, 1927.

²⁶ *Harijan*, February 13, 1937.

²⁷ *Yervada Mandir, op. cit.*

the distinctions of rank as the employer will come to know and realize the difficulties of his laborers and improves their "physical and mental health."

Whatever little scope for dispute is still left in the industrial sphere will be ended by stressing the importance of the morality of means and insistence on duties rather than rights. Gandhi insisted that the means, both of labor and capital, should be moral because we reap as we sow.²⁸ And we have control over means and not ends. His moral means are truth, non-violence and Satyagraha. When both labor and capital act morally, each will be prepared to hear the other's case and enter into an agreement which is just and honorable to both.

There is experimental basis for the belief that industrial workers will seldom revolt against an employer whose employment policies and practices are founded upon principles of fair play.²⁹ Non-violence and purification (i.e., self-reform) are great soul forces and help in bringing about a change of heart in the exploiter and the immoral owner. And if, due to sheer bad luck, justice is denied to a party, non-violent non-cooperation—the strike—will win it justice speedily, without creating dissension, ill-will and feelings of winning or losing. The life of Gandhi, whether in the field of politics, social reform or industry, bears testimony to this fact. We, Indians, won our independence through non-violence and we find that our relations with England and Englishmen have become more cordial than they previously had been.

To Gandhi, as I have said, duties were more important than rights:

The capitalists and Zamindars [landowners] talk of their rights, the laborer on the other hand of his, the prince of his divine right to rule, the ryot of his right to resist it. If all simply insist on rights and not on duties, there will be utter confusion and chaos. . . . Hence if instead of insisting on rights, everyone does his duty, immediately the rule of order will be established among mankind.³⁰

The duty of labor, according to Gandhi, is to work honestly and the duty of capital is to treat labor as an equal partner and to act as a trustee. If both insist on their respective duties, naturally the chances of a struggle based on duties would be non-existent.

The Mahatma of India thus tried to resolve permanently the fight between labor and capital in his own way—a way which has its roots in morality. A Westerner may smile at it and call it a Utopian dream. One can only remind him of the words of Arnold Toynbee, "There is no in-

²⁸ *Young India*, December 26, 1924.

²⁹ Watkins and Dodd, *op. cit.*, p. 108.

³⁰ R. N. Bose, *op. cit.*, p. 58.

evitability of failure, if the challenge is properly met." Or repeat the apt comment of Aldous Huxley that

Sooner or later it will be realized that this dreamer had his feet firmly planted on the ground and that the idealist was the most practical of men.³¹

Gandhi, who was also aware of this type of comment, once said, "I am not a visionary. I claim to be a practical idealist."³²

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³¹ Vishwa Bharti, *Gandhi Memorial Peace Number*, Bolpur, 1949.

³² *Young India*, August 11, 1920.

R E V I E W S

Horace Kallen's Credo

What I Believe and Why—Maybe: Essays for the Modern World. By Horace M. Kallen. Edited by Alfred J. Marrow. New York: Horizon Press, 1971, 208 pp., \$6.50.

ALFRED J. MARROW, the psychologist, has assembled in this book a collection of essays by the American philosopher, Horace M. Kallen, which document John R. Everett's claim that Kallen is "a very special kind of philosopher—a lover of truth, a doubter of opinions, a defender of freedom, a believer in the communicating power of language, a hater of disguise and deceit, a promoter of reason and a protector of fairness and equal liberty."

Dr. Kallen, now 88, has always been of special interest to me as one of the few great philosophers of American democracy. His lifelong dedication to bringing into being a democratic society on a firm libertarian foundation, organized on cooperative lines, found expression in his teaching, primarily at the New School for Social Research. He taught philosophy there from its founding in 1919 until his retirement in 1970. It also found an outlet in his life of action, as an author of nearly 40 books and more than 400 articles, and as an active participant in the cooperative, the scientific humanist, the civil liberties, the Zionist and other movements.

This book helps us to understand the ideas that made Horace Kallen the thinker that he is and to appreciate what led him into the social action that put those ideas into practice. Dr. Marrow did not attempt to choose Kallen's "best" essays. Instead he has covered some of the major themes of Kallen's career as philosopher, educator, and advocate of equality in freedom. His choice was a happy one. As Dr. Kallen has said in another

context, his writings were a challenge "to stand up and profess my philosophic faith and why I hold it." This collection proves he not only met that challenge delightfully; he fashioned a vital, effective credo that should commend itself to many reasonable men and women.

WILL LISSNER

Sociology: The Study of Human Relations. By Arnold M. and Caroline B. Rose. New York: Random House/Alfred A. Knopf, 1970, 633 pp., index, glossary, \$9.95.

Arnold Rose was engaged upon a revision of this widely-appreciated textbook when he died in January, 1968. His wife, Caroline B. Rose, author of *Sociology: The Study of Man* (1965), completed the task. So another generation of students will be introduced to sociology through Rose's enthusiasm for the science and his love for his discipline. They will be deeply in Mrs. Rose's debt. Rose published the book in 1956 and revised it in 1965. Its organization was the key to the growing and continuing demand for it. "Knowledge," Rose realized, "must have a framework to be absorbed in large quantities." So he gave his work a systematic framework designed to be specific for sociology.

Much labor went into this book, by the original author and the current reviser. It is well rewarded. What it yielded was a work guaranteeing the student a painless introduction to the study of relations between human beings and how interpersonal relations influence human behavior. Even more, it helps to arouse the student's interest in the study of social factors influencing human behavior and to fascinate him with the possibilities of research in this area. Sociology has accumulated a body of important findings. This book helps the reader to understand many of the more important of them. It also helps him or her to appreciate the opportunities for multiplying them.

W. L.

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